

# Brandeis Review

Fall 1984

Volume 4

Number 1





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Brandeis University represents a  
challenge for others to follow. The  
development of the University is our  
democratic privilege and  
responsibility.

Mrs. Eleanor Roosevelt

Two anniversaries that are particularly significant to Brandeis are being commemorated in this issue of *The Review*: Eleanor Roosevelt's one hundredth and the Florence Heller Graduate School for Advanced Studies in Social Welfare's twenty-fifth.

An international figure — and the university's professional school. Two national institutions recognized for their commitment to social welfare and the dignity of the individual. Mrs. Roosevelt's legendary accomplishments and her connection to Brandeis are recalled in articles by Professor Lawrence Fuchs, who taught a seminar with her, and Henry Morgenthau, the executive producer of her television series.

The Heller School, in a quarter of a century, has trained social policy leaders, stretched the bounds of traditional social research and helped plot the course of America's social policy.

As the country celebrates the Eleanor Roosevelt centennial this October, Brandeis alumni and friends will recall her association with our university. She was a member of the Board of Trustees, speaker at the university's first convocation and its first commencement, and eventually joined the faculty as a visiting lecturer. She also served as a hostess of a television program, "Prospects of Mankind," that was broadcast from the campus. Founding president Abram L. Sachar has described her relation to Brandeis as "a genuine love affair."

There are many around campus who recall with affection and admiration her influence on their lives. Trustee Gustav Ranis '52, a student when she gave her convocation address, is one who forged strong bonds with her. Some of her many letters to him are also reprinted in this issue.

In celebration of Heller's twenty-fifth anniversary, we are including articles written by the Heller faculty, each article representing one major facet of research within that school.

Concern for the freedom of the individual and social justice is also echoed in the speech by Cardinal Jaime L. Sin of the Philippines who was Brandeis' commencement speaker this year. His eloquent plea to which an audience of 4000 attending graduation ceremonies responded with warmth, is excerpted in this issue.

the editor



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Cover: photo by Henry Grossman '58 who captured this portrait of Mrs. Eleanor Roosevelt while he was a student at Brandeis.

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by Henry Morgenthau



Henry Kissinger and Adlai Stevenson were two of the many well known political figures that appeared on the television series *Prospects of Mankind*. Hosted by Mrs. Roosevelt, the program was recorded on the Brandeis campus.



Henry Morgenthau was the executive producer of the "Prospects of Mankind" television series, and many other films and documentaries for WGBH-TV, the public television station in Boston. He is currently writing a social history of the Morgenthau family.

During the last three years of her life, Eleanor Roosevelt hosted *Prospects of Mankind*, a television series based at Brandeis University. The first program was recorded on the week of her 75th birthday. It was her idea of just the right way to celebrate — starting something new that would be useful to others, young people especially. She would have hated to have anyone give her a party. But the sparkling eyes were a give-away that she was absolutely delighted with the big birthday cake we had wheeled onto the TV set constructed on the stage of Slosberg Auditorium, right in the middle of the jumble of cables and electronic equipment.

The large crew which had been assigned to put her through her paces in preparation for this opening show stood back in the shadows a bit stiffly until she reached out in that unique way of hers that made everyone feel at home, no matter what the surroundings. Most people were surprised and delighted by the warmth of this great lady. I suppose I had come to take it for granted, having known Mrs. Roosevelt for as long as I could remember.

The Morgenthaus and the Roosevelts had a special relationship rooted in the Dutchess County soil that only rarely sprouted Democrats. The friendship between my mother and Eleanor Roosevelt had been especially companionable, and I have no doubt that many decisions which affected my father's career were arrived at in quiet confidence by these two determined women.

Some time after my mother's untimely death in 1949, I left my job at CBS to go to work as a producer for the television and radio programs Mrs. Roosevelt was making at NBC. The constraints of commercial broadcasting were frequently abhorrent to her. A decade later I was working simultaneously as a producer at WGBH-TV, the Boston educational station, and as associate director of Brandeis' Morse Communications Center. I found an opportunity to propose a television series that would reflect the true Eleanor Roosevelt and her concern for others. The concept for what became the *Eleanor Roosevelt: Prospects of Mankind* series was a very simple one. As its advocate, I found all parties concerned immediately receptive. Abram Sachar, then president of the university, noted in his book, *A Host at Last*: "It was an impressive achievement for Brandeis and for educational television to have Mrs. Roosevelt agree to moderate a monthly television program. . . . The format was that of a colloquium, based on crucial national and international issues, between Mrs. Roosevelt and her guests in the presence of interested Brandeis students."

I was the executive producer for WGBH which, as a member station, produced the series for National Educational Television (NET), the forerunner of PBS. NET put up the money for the production and distribution costs; Brandeis paid Mrs. Roosevelt \$1,000 per program.





The first program was recorded on the week of her 75th birthday.

Each program opened with the announcement: "From the campus of Brandeis University, Waltham, Massachusetts, National Educational Television presents the WGBH-TV production, *Mrs. Eleanor Roosevelt: Prospects of Mankind*." Quite a mouthful!

Professor Lawrence Fuchs coordinated Mrs. Roosevelt's academic schedule at Brandeis with our broadcasts. We generally recorded the program on Sunday afternoon, and she stayed overnight and held a seminar on Monday, which she taught jointly with Professor Fuchs. Some of the students who were there at the time, like Congressman Stephen Solarz '62, credit their decision to enter public life to her inspiration. The entire experience was a conspiracy of good will.

When President Eisenhower failed to reappoint Mrs. Roosevelt to the U.N. Delegation, she chose to devote a major portion of her time to the American Association for the United Nations. Reflecting this interest, her television programs focused primarily on world affairs.

We knew that the best programs would be those that expressed the concerns that Mrs. Roosevelt, herself, felt were important to communicate. They must involve guests she was interested in and who, in turn, were interested in her. People wanted an intimate expression of her own views.

During what turned out to be the final three years of her life, there was no let-up in the fabled energy. Indeed, with some sense that her time was running out — which she kept well hidden — she was even more ardent in her determination. The days were long and carefully scheduled. We learned to take advantage of the time she allotted to us, by planning well in advance. We prepared a broad outline of the programs we wanted to do. She had her own schedule worked out to the last detail, including all the things she wanted to do when she came to Brandeis. We exchanged ideas on the people we felt would be good to have on the program and made notes on those she thought we should have, and the subjects she wanted to talk about.

Before each program, Diana Tead Michaelis, Dr. Beatrice Braude, and I briefed Mrs. Roosevelt in her New York apartment. Paul Noble, our director, worked with her on the style and pacing of her performance.

We learned to value Mrs. Roosevelt's ideas and made it our business not to try to impose our own. The more the programs were really hers, the better they were. She was always herself and completely at ease, confident in what she wanted to say and what she didn't want to say. She tended to look for the optimistic and pleasant side of things; she was certainly no muckraker. It was part of her philosophy of life to look for the strengths and the goodness in people; she disliked probing weaknesses.

On the personal level, she was very sensitive and supportive when it came to other people's weaknesses, especially those of men. This probably sprang from her painful relationship with her father, whom she loved very much, and also later with her brother. She got tremendous satisfaction out of trying to help others and feeling needed. One of the best examples of this was her relationship with Adlai Stevenson. He relied on her in a way that perhaps no other person in public life had. She realized that he had great difficulty in being at ease with ordinary, unsophisticated people, and she tried to help him with that. She once told this story about campaigning with him.

Riding in a limousine in New York on their way to Harlem for a speaking engagement, they stopped at a red light. People recognized Mrs. Roosevelt, and maybe Stevenson, too, and crowded around the car, trapping it. Stevenson cringed in the corner, imploring her: "What should I say to these people?" Mrs. Roosevelt said, "I realized then that if he didn't know, there was nothing I could tell him." She had previously suggested that he try doing what her husband had done in the early part of his career. FDR would go around in an old car and stop and talk with people, and very often conduct a little business with them. She suggested that Stevenson try to do that, particularly when he was still not generally recognized. In some ways she treated him like a son, feeling more needed than she had ever felt with FDR. She was always attracted to the underdogs or trying to help them overcome their weaknesses.

When John F. Kennedy came on the national scene, she was still very much a Stevenson person and was not about to support him. That reluctance was also a response to her intense dislike of Joe Kennedy. She thought that he was spending too much money manipulating people. I remember once mentioning someone as an advisor to Jack Kennedy. "Everybody seems to be advising Jack Kennedy," she snapped back in a rare display of irritability.

There were a number of things that Jack Kennedy had done or not done that went against her beliefs. She felt that he had never truly made himself clear on Joseph McCarthy, and Walter Reuther, with whom she was very close, persuaded her that he was not adequately sympathetic to labor. As the Kennedy star began to rise, everybody was trying to get Mrs. Roosevelt to come out for him. She was certainly not someone to be pushed, and she could become very touchy when anyone tried. At certain times I talked to her about Kennedy, and she was quite short with me. I thought it was important to have him on her program.

Kennedy, for his part, was very anxious to win over Mrs. Roosevelt. First of all, it was certainly to his interest, and second, he was a man who liked to meet a challenge. I approached Kennedy through a good mutual friend, John Kenneth Galbraith, who persuaded him to come on a program to discuss Europe and NATO as he was then a member of the Senate Foreign Relations Committee. On this rare occasion we had invited a guest in whom Mrs. Roosevelt had no special interest. When Kennedy agreed to come on *Prospects*, it was just before he decided to enter the Democratic primary in New Hampshire.





"I do not believe  
we are ever severely damaged  
by telling the truth."

Edward R. Murrow

NBC's *Meet the Press* was considered to be the most important television exposure for a public figure. There was an agreement to put Kennedy on, with Lyndon Johnson following him a week or two later. Then Johnson decided he wanted to switch to the Sunday assigned to Kennedy. At that time Johnson was Senate Majority leader. He was considered by some to hold more power than President Eisenhower himself. So Johnson had his way, and NBC re-scheduled Kennedy for the Sunday afternoon he was to put in his appearance on *Prospects*.

Kennedy wanted to make his announcement on *Meet the Press*, and wished to cancel his date for our program, while at the same time he did not want to do anything that would irritate Mrs. Roosevelt.

Late on an afternoon in October 1959, the telephone rang at my desk; it was Kennedy on the line. "Henry, can you get me off the hook with Mrs. Roosevelt?" he pleaded with me on the phone. "I want to make my announcement. I'm going to get 'Meet the Press' to change the date, and I just don't see how I can do it." "Well, Jack," I said, "I'm afraid Mrs. Roosevelt will be terribly disappointed," knowing that she really couldn't care less. There was a silence, and then he said, "We'll see what we can do to work things out."

He then did everything in his power to accommodate her. We arranged to record *Prospects* on Saturday instead of Sunday when *Meet the Press* was on. He held his press conference in Washington at mid-day on Saturday and then flew up to Boston in the family plane. He came to Brandeis to do our program, and appeared on *Meet the Press* on Sunday. We promised *Meet the Press* that our program would not be aired anywhere until after theirs. Kennedy had taken great pains to please Mrs. Roosevelt at a time that was obviously crucial to his career.

Kennedy flew to Boston immediately following the Washington press conference in which he announced that he was running for the Presidency. The press was at Logan Airport when he arrived and followed him out to Brandeis. This program, which was supposed to be a discussion of foreign aid, with Kennedy simply as one of Mrs. Roosevelt's guests, began to get a little bit out of control. People were pressing Mrs. Roosevelt to comment on the Kennedy candidacy. She was not happy, and as soon as the television program was recorded, members of the press crowded onto the set and there was a spontaneous news conference. All the reporters' questions were directed to Kennedy. Mrs. Roosevelt stood on the platform, ignored, until finally Louis Lyons, who was curator of the Neiman Fellows and a commentator on WGBH, said, "Mrs. Roosevelt, this is a very important day. Senator Kennedy has announced his candidacy. Is there anything that you would like to say?" There was a second's silence, followed by Mrs. Roosevelt's one-word answer: "No" — in a very low, colorless voice, which set off a gasp from everyone in the hall.

Moments later, as Kennedy broke away, he said to me, "Henry, I do think she could have been a little warmer." I felt very badly because I knew that he had really put himself out to comply with what he believed were Mrs. Roosevelt's wishes.

That night he had dinner at Arthur Schlesinger's home in Cambridge. He was furious. The next day's press reports, in light of the general Kennedy euphoria, glossed over the incident.

During the three-year span of *Prospects of Mankind*, Mrs. Roosevelt attracted a parade of guests that glittered with the names of those who were guiding world destiny — the doers and the thinkers. In retrospect one must take note that she had also lured many whose moment on center stage lay ahead. Henry Kissinger and Zbigniew Brzezinski were still obscure young associate professors, whose orbit was then confined to academics. But the Eleanor Roosevelt warmth was an attraction to all, old and young; established and aspiring.

Edward R. Murrow expressed it with inimitable succinctness while making his first appearance in front of the camera after assuming the position of director of the United States Information Agency. "Well, Mrs. Roosevelt, I would like to say at the outset that it's a great pleasure to bask in the sunshine of your countenance anywhere, at any time." Accepting the compliment, Mrs. Roosevelt proceeded in her deceptively lady-like way to pin him down. She wanted to know "After the high hopes felt around the world for the Kennedy administration, how much has American prestige suffered?"

"I think you would argue that prestige is a very inexact word," Murrow answered. "But it is quite true that things have not been very tranquil in Washington during recent weeks, with Cuba, with Laos, with Alabama." He went on to say, "I think I may be a minority in this, but I do not believe that we are ever severely damaged by telling the truth. We could not conceal it if we tried."

In a program dealing with the threat of nuclear war and arms control, Mrs. Roosevelt found the young Henry Kissinger less unequivocal concerning the truth. "I would agree that we need a much more careful and comprehensive arms control program than we have had," Kissinger told her. "I would, however, also feel we have to realize that we probably cannot compete with the Soviet Union in making sweeping propaganda proposals only for propaganda reasons." Mrs. Roosevelt seemed shocked. "That would be bad anyway, because that's dishonest."

At a later date she continued the dialogue with Lord Bertrand Russell, the great scientist philosopher and arch pacifist, then in his 90th year. Mrs. Roosevelt found his position so extreme that she was compelled to take the other side.

## A Friendship That Began During a Commencement

Russell proposed to both the Russians and the Americans to sign a statement that an all-out nuclear war would be a greater disaster than the world-wide victory of either side.

Mrs. Roosevelt replied with considerable vehemence, "Now *that* I would *not* be willing to sign, and I doubt if you would get it signed by most of the people in the United States." She continued, "I think most people in the United States, perhaps partly because they do not *know* or really realize that there could be no human beings left in the world, but in any case, they would say if we have to be dominated by the Soviet Union, then we would rather be wiped out!"

Mrs. Roosevelt had traveled to Great Britain to record this program. Each year while *Prospects of Mankind* was being produced we synchronized our schedule with her travel plans in order to make some of our most significant programs in the studios of the B.B.C. and the French Broadcasting System. They were done on an exchange basis without cost to us other than travel expenses. For the French programs, Mrs. Roosevelt discoursed with her very fluent command of that language which she had acquired in girlhood.

In the spring of 1962, I had completed three years as producer of Mrs. Roosevelt's television programs. It had been an exciting and stressful experience. Mrs. Roosevelt, for her part, had taken it all in her stride. When people asked her how she managed to accomplish so much she was fond of answering, "because I don't waste any time worrying." At the same time, she was never insensitive to the anxieties of her associates. One could always count on her being scrupulously faithful to her commitments. I remember once overhearing her say, "I always come to Boston a little bit ahead of time because Henry worries."

During that summer I visited her in Hyde Park to talk about future programs. Her final illness was beginning to make her feel weak and tired. She said that she knew it was going to be difficult for her to keep speaking engagements. Therefore, she wanted to do even more television than she had before. That way she could communicate with all the people she wanted to reach.

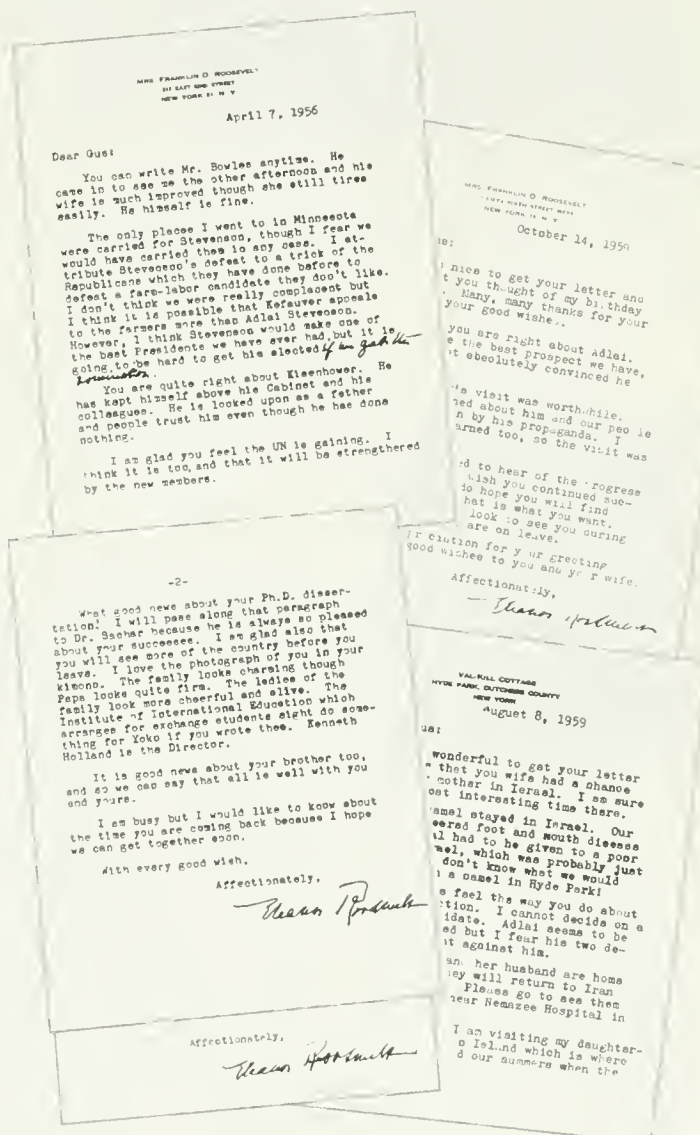
By September she was still trying to keep going in her accustomed way, but she knew it was a losing battle. Joseph Lash, her biographer, noted that "instead of saying good night to her friends and children, she now said goodbye."

She sent for me to come to her New York City home to talk about plans for a new television series. I was ushered into her bedroom by her secretary, Maureen Corr. She appeared as a great white mound under the bed clothes. She managed to rouse herself and we talked earnestly about the future. After about ten minutes she dropped off to sleep. I kissed her cheek and tiptoed out of the room. That was the last time I saw her. ■

He was a young man giving the valedictorian speech at Brandeis' first commencement in 1952. His talk was pessimistic. The Korean War cast a shadow on his vision of the future. The guest speaker was one of the country's most renowned and respected individuals. Yet when Eleanor Roosevelt heard what Gustav Ranis had to say she felt compelled to respond. She put aside her prepared speech and spoke spontaneously.

What began as a disagreement eased into a friendship that lasted until her death. Ranis was invited to her homes in Hyde Park and New York, and they exchanged many letters through the years, of which we have here merely a sample. "What impressed me most about her," says Ranis, "was her complete sincerity and honesty. Her intelligence enabled her to capsule truth in a simple way. She was never just trying to posture."

Today Ranis is a professor of international economics at Yale University and a Brandeis Trustee.





# The Lady and the Senator

by Lawrence H. Fuchs



*The relationship between Eleanor Roosevelt and John F. Kennedy was complex. At first she distrusted him for being a Catholic and the son of Joseph Kennedy. Eventually she supported him and learned to admire him. They became devoted friends.*



*Lawrence H. Fuchs is the Meyer and Walter Jaffe Professor of American Civilization and Politics. He has served as director of the Peace Corps in the early 60s and was recently the director of the U.S. Select Commission on Immigration and Refugee Policy. Among the many books he has written is John F. Kennedy and American Catholicism. This article was printed in a longer version in "American Heritage."*

She was the most powerful woman in America, if not the world. He was the junior senator from the state of Massachusetts. She wanted no position or favor, only to extend her already enormous influence, something she professed not to have. He wanted desperately to become the next President of the United States. Clearly he was at a disadvantage.

I saw Mrs. Roosevelt weekly in the spring of 1958 and throughout the academic years of 1959-60 and 1960-61. We taught a seminar together on international law and organization at Brandeis. She adopted me and my family as she did so many others. There were visits to her cottage at Val-Kill and dinners at my home in Massachusetts. From there we would drive to the campus, where she usually slept the night before our morning class. Then breakfast in the mornings to prepare for the seminar or just as often to talk politics.

Mrs. Roosevelt had not thought Kennedy vice presidential caliber in 1956. Then that usually gracious and generous lady had taken a scalpel to Kennedy at the Democratic National Convention in Chicago in a meeting that had been arranged by a mutual friend. Kennedy wanted her to support him for the vice presidency and to speak to Stevenson, the presidential nominee and her good friend, on his behalf. Instead she lectured the Senator in a room full of people for his not having taken a stronger stand against Joseph McCarthy's witch-hunting tactics in the early fifties.

The Lady lanced the Senator again in December, 1958, on an ABC television program called "College News Conference," praising his charm but doubting that he had the independence to have the courage that he so admired in his Pulitzer Prize-winning book, *Profiles in Courage*. She repeated a report that "Senator Kennedy's father had been spending oodles of money all over the country and probably has a paid representative in every state by now."

Kennedy was appalled by this loosening of the tongue, and on December 11 he wrote Mrs. Roosevelt to protest that she could not name one paid representative or give a single example of spending by his father to obtain the Presidency for him. She replied 16 days later with a frosty letter, indulging the McCarthy tactics she so deplored. "I was told," she wrote, "that your father said openly he would spend any money to make his son the first Catholic president of this country, and many people as I travel abroad tell me of money spent by him on your behalf. This," she concluded, "seems commonly accepted as a fact."

Kennedy realized it would do him no good to provoke Mrs. Roosevelt further, since she currently led every public-opinion poll as the most admired woman in the world.





*Kennedy was uneasy about the press conference scheduled after his appearance on Prospects of Mankind.*

There would come a time of easy, flowing mutual warmth and affection, but that time was not the spring of 1958. Mrs. Roosevelt had supported Jack Kennedy for the Senate against Henry Cabot Lodge in 1952 because he was a Democrat, but now she doubted his qualifications for the White House. Besides thinking he was young and inexperienced, she had four other reasons for opposing Kennedy. On the positive side was her devotion to Adlai Stevenson. Of three negative reasons, two — that John F. Kennedy was a Catholic, and he was the son of Joseph Kennedy — she later admitted were not entirely fair or rational. The final explanation was her strong view that an Irish-Catholic senator from an Irish-Catholic constituency, who purported to be a liberal, could have taken a significant role in helping to block the foul assault made by Joe McCarthy on civil liberties in the early 1950s. No matter how many times friends of Senator Kennedy's repeated the basic facts of his opposition to McCarthy, she remained unconvinced that he could not have done much more. Those facts included Kennedy having ignored a personal plea from McCarthy to vote against confirmation of Harvard's James Conant as ambassador to West Germany, helping to block McCarthy's friend Robert Lee from appointment to the Federal Communications Commission, and preparing a speech to be made on the Senate floor explaining why he was going to vote in favor of the motion to censure the Wisconsin senator.

Kennedy never made the speech, because the Senate voted to curtail debate before his turn came; and he never voted on the censure motion itself, because he was in a New York hospital, where he developed a perilous infection following a spinal-fusion operation. He lay ill for five weeks, too ill even to discuss what was going on in the Senate. Of course Mrs. Roosevelt's point was not about the censure vote itself. She thought that someone who had written a book on profiles in courage — a very heroic title, as even Kennedy might have admitted — ought to exhibit courage precisely on the big issues when the political cost might be high.

Mrs. Roosevelt understood politics. She did not expect Hubert Humphrey to come out against farm subsidies or Lyndon Johnson to oppose the oil-depletion allowance, but the McCarthy issue was something else. It went to the question of democracy itself, and Kennedy, she believed, had a margin of safety in which to help lead the nation away from McCarthyism. He should have socked it to McCarthy, even if it had cost him some votes.

Her fears about the Catholic Church were typical of liberals in the 1950s. She worried about the temporal power of the Church, opposed federal aid to parochial schools (except for transportation), had supported Loyalist Spain in the 30s, and was furious when New York City's public schools banned *The Nation* from their libraries in response to Catholic pressure without a public hearing. When she wrote a column on the school-aid issue, Francis Cardinal Spellman, later a tough foe of Kennedy in his bid for the Presidency, delivered a sweeping public attack against her that was echoed in Catholic journals throughout the United States and Europe.

When J.F.K. began to speak out forcefully and clearly on the separation of church and state, Mrs. Roosevelt's nervousness was relieved. But in 1958 the Senator's record was not that clear, and the terrible battles between Catholics and liberals during the 1940s and early 50s were fresh in her mind. An open person who wanted to be totally free of prejudice, Mrs. Roosevelt had thrown over the genteel anti-Semitism of her youth; but in 1958 it was still common for liberal Protestants to be anti-Catholic.

Although she had strongly supported Al Smith for President in 1928, she was nagged by the thought that a Catholic president in the 1960s might further strengthen the temporal power of the Church in the United States.

But most important of all in Mrs. Roosevelt's view was that Kennedy's family was known to be close to members of the Catholic hierarchy, and his father was reported to be a heavy contributor to Catholic causes.

Mrs. Roosevelt's hostility toward the father was unambiguous and from the Senator's point of view irrational and unfair. Even she knew that. In the second volume of his biography of Mrs. Roosevelt, Joseph P. Lash tells of a conversation she had on Memorial Day, 1960, with Representative Richard Bolling of Missouri, a leading White House liberal and Kennedy partisan: "She knew the sins of the father should not be visited on the sons, she explained apologetically to Bolling, but she had to admit she was strongly affected by her feeling about Joe Kennedy."

When I had told her earlier that year that the Senator thought she was prejudiced against him because of his father, she readily admitted that she thought the father was a narrow-minded, bigoted, and power-hungry man but that she would try to judge John F. Kennedy on his own merits. It was a struggle for her. The father, when President Roosevelt's ambassador to the Court of St. James, seemed to acquiesce in Hitler's growing power in Europe. Mrs. Roosevelt remembered one conversation in particular, a luncheon at Hyde Park with the ambassador, when he appeared to be almost indifferent to the plight of those being trampled under Hitler's boot.

It was that conversation between Mrs. Roosevelt and his father to which Kennedy referred when we talked for almost an hour in Hawaii in the spring of 1959. I was writing a book on ethnic politics; he was seeking delegate votes for the upcoming Democratic convention in 1960. Talking with me alone in his room at the elegant Royal Hawaiian Hotel, he thought it absurd that Mrs. Roosevelt did not see him as a genuine heir to her own husband's policies. There was no other explanation for her opposition or those of her liberal friends than prejudice against his religion and his father, he asserted. When I explained that the main ground for her reluctance to support him was her strong preference for Stevenson in contrast to his youth and relative inexperience, he repeated, "It's just a matter of prejudice; it's an argument she had with my father 30 years ago." When I answered back that it was more complicated than that, he was sharp. "You just don't know," he said. "She hates my father."

I doubt if Mrs. Roosevelt had much understanding of the relationship between Kennedy and his father. She had been devoted and uncritical toward hers and had a rich fantasy life about him before and even after he died when she was a young girl. He had been a phantom, touching her life infrequently by his real presence but constantly in her imagination. The only other father she knew well — Franklin — was as different a father from Joe Kennedy as he was from her own. Franklin was often indifferent to his children, sometimes indulgent, but rarely involved. Joe Kennedy was enormously involved in the lives of his children, but he never tried to force a particular line of thinking on Jack.

I talked to her frequently of Kennedy, and she listened carefully, but the twice-beaten non-candidate Adlai was her choice. Although she was devoted to him, she understood his limitations. She told me of the talk she had had with him after he lost in 1952. "Look," she said. "You're never going to get elected President of the United States unless you can feel with the little people. It's not enough to understand them intellectually; you have to feel with them. You should spend the next four years driving around the country, getting out at the gas stations and the lunch counters, sitting down and listening to people. Try to understand them, not just in an intellectual way, but feel their problems so you'll be able to communicate with them." Despite his remoteness from ordinary people she loved him. He held for her a fascination, I think, not just because of his intellectual depth or artistry with words, but because she found in him a deep sense of compassion and tragedy. He may not have communicated a warm feeling to many people, but he knew about humanity, its foibles and its agonies. I remember being amazed to see at her house in Manhattan the picture she had of him in her bedroom on her dressing table. It was larger than any other in the room, I think, even larger than pictures of her husband.

On January 2 Kennedy came to Cambridge, where he did a television program with Mrs. Roosevelt (arranged by John Kenneth Galbraith, who, like Schlesinger and others, was trying to bring the liberals together), and they exchanged pleasantries. In late spring, after the Wisconsin and West Virginia primaries, with Kennedy now clearly the front-runner, he returned to appear with Mrs. Roosevelt on "Prospects of Mankind," a television program emanating from Brandeis University.

Kennedy, whom I had not seen since Hawaii a year before, came early to meet with other participants on the program and the staff of WGBH. We had lunch and then talked for about an hour before the broadcast. The conversation turned mainly to issues. He wanted to talk about the Common Market, nuclear disarmament, and other questions of high policy. Mrs. Roosevelt seemed detached, giving no sign of enthusiasm or endorsement. Somewhere in the conversation Kennedy was told (or reminded) that a press conference had been scheduled for him and Mrs.

Roosevelt, to be held immediately after the broadcast. He smelled a trap. Taking me off to the side, he asked if I could arrange to have her call off the press conference. Even though it might look funny, he thought it would be better than risking some kind of argument. I asked him what he was afraid of. "Well," he said, "she might bring up the McCarthy business." No good could come of that, he thought. It would just get people excited. By this time Kennedy was not happy about his failure to oppose McCarthy more strongly. That was a subject he wanted to bury. Besides, Mrs. Roosevelt had zapped him on that issue. Why take a chance on the same thing happening again?

I agreed to talk to her, arguing first with the Senator that it would not do any good. Mrs. Roosevelt and I met in the little room we used to prepare for the broadcast. I began to relay the message, but before I could complete his suggestion that she cancel the press conference, she interrupted and said something like: "You tell the Senator not to worry. Everything will be all right. I won't do anything that would embarrass him." I had been trying to play it cool, and I would not have hinted that he might be the least bit embarrassed, but she knew just what I meant. So, having run my errand for the Senator, I came back with the message from the Lady. "Well, I'll have to live with it," he said. But he fidgeted until the press conference was over.

Mrs. Roosevelt and I talked politics before and after our last class at Brandeis on May 9. She remained firm in her intention not to attend the convention, making it clear that Kennedy was her second choice for President. Her dilemma was real. She did not want to stop Kennedy with the other hopefuls, and Adlai was doing nothing to get out in front on his own candidacy. Yet she felt it her duty (the big word in her life) to hold what was left of the Stevenson people together. That Stevenson had been beaten twice by Eisenhower did not daunt her, since she believed Nixon was beatable. That she ran the risk of having Johnson or Symington nominated did not, despite her usual political acumen, enter her conversation. She waived the possibility. The country badly needed a Stevenson-Kennedy ticket, and that was that.

On June 7, the very day she wrote in her column that she would not be coming out for any candidate until the national convention, she saw a story in the *New York Times* that told of prominent liberal friends planning an endorsement of Kennedy. One of them, Henry Steele Commager, was quoted as saying that he would have supported Stevenson if only he had been a candidate. On June 10, in a complete surprise to me, since I had talked with her by phone only a few days before, she announced that she had changed her mind and was going to the convention to plead for the nomination of Adlai Stevenson. In her statement she admitted that Kennedy was the leading candidate and said that she admired him for the way that he had campaigned; but since the failure of the summit conference between Eisenhower and Khrushchev she was convinced from her mail that most





*Her ties to Brandeis were strong. She was a member of the Board of Trustees, a member of the faculty, recorded her television show on campus, and was principal speaker at Brandeis' first commencement in 1952.*

people wanted somebody as mature and experienced as Governor Stevenson to be President. She concluded that the strongest possible ticket would be Stevenson-Kennedy, acknowledging that it would ask a great deal of Mr. Kennedy to take second place. In consolation she offered that it would give him "the opportunity to grow and learn, and he is young enough yet to look forward to many more years of public service." He was once again the "young Senator."

Stevenson could hold out no longer and became an open candidate. The facts of the July convention are well known.

When I saw Mrs. Roosevelt again after the convention, she made pleasant compliments about Kennedy. But she did not join Herbert Lehman as an honorary head of Kennedy's committee in New York at first, still slightly skeptical of his bona fides as a liberal. Kennedy, relentless in his pursuit, looked upon Mrs. Roosevelt as something of a sovereign state. If not friendship, at least he needed a treaty of alliance from her. It was time to parley.

Once again a mutual friend, Hyman Bookbinder, planned a rendezvous, this time through Ted Sorensen. Once more Kennedy was nervous. Bookbinder and Sorensen arranged for Kennedy to be invited to make an address at Hyde Park on August 14 commemorating the twenty-fifth anniversary of the signing of the Social Security Act by F.D.R. He would come, said Kennedy, but only if Mrs. Roosevelt wanted him to be at Hyde Park. She sent back the message that she would welcome a private meeting with the Senator.

The moment was inauspicious, it turned out, because John Roosevelt's daughter was killed in a fall from a horse the night before the scheduled speech and meeting. Although

Kennedy probably did not know that Sally was one of the grandchildren Mrs. Roosevelt saw frequently, since John lived nearby, and that she was particularly proud of and devoted to her grandchildren, he was sensitive enough to suggest that their private talk be postponed. But Eleanor's code — service, duty, graciousness — would not permit indulgence in private sorrow. "I insist on seeing you," the word went back.

They talked the next day after the rally, which she did not attend. Now the kindness for which she was famous enveloped Kennedy. She wanted him to know, she reported to her friends, that he was welcome at her house and that she was grateful he would take the trouble to come to see her. He had expected her to demand Adlai Stevenson's appointment as Secretary of State in exchange for her support. Mrs. Roosevelt must have known that Stevenson would have to win that job on his own. She did urge him to bring Chester Bowles and Stevenson into the campaign whenever he could but made it a point not to ask for anything else and actually told Kennedy that he should choose his Cabinet members without making any promises or commitments to anybody in advance of his election.

Kennedy was delighted. When Ken O'Donnell asked Dave Powers how he had gotten along with the First Lady, Dave reported that "the Senator came out of there like a boy who has just made a good confession. It was a great load off his mind." William Walton, Kennedy's good friend, who went along to Hyde Park and spent a few minutes with Eleanor and Jack, said, according to Joe Lash, that Kennedy left Eleanor "absolutely smitten by this woman. . . ." No doubt he was enormously grateful and relieved.

In talks I had with Mrs. Roosevelt later about her reconciliation with Kennedy, she made light of it. Earlier she had complained mildly about what she called his "cocksuredness"; now she spoke of his openness and willingness to learn, qualities she had had represented to her by me, her sons, and others for months. Anyway, the facts were there. Kennedy was the Democratic nominee with dozens of strong liberals in his corner. Nixon, whom she considered to be a particularly small-minded, manipulative, and untrustworthy person, was the opposition. Kennedy sought an ally; he won a devoted friend.

As the campaign progressed her respect for Kennedy grew (except on the Cuban issue). After the election Kennedy was grateful for her help. He wanted her in the Presidential box at the inauguration, where she would be warm and comfortable, but she preferred to sit in the stand below in the twenty-degree cold, wrapped in an army blanket. She could stand that; it would not be as cold as those icy baths her grandmother used to make her take when she was a child. With her exquisite sense of the fitness of things she knew she did not belong in the box. She had not been an early booster, nor had she been a central figure in the campaign. Besides, it was time for the young man to have as much of the limelight as possible for himself.



Kennedy's inaugural speech moved Mrs. Roosevelt deeply. She saw it as a call to service, and nothing was more important to her than that. I remember once asking her to let me cut and serve apple pie following one of her simple lunches at Val-Kill. "Oh no," she exclaimed, "don't you know I like to serve?" She practically shouted the words "like" and "serve." For at least two years she had been promoting the idea of a national service corps of young people to work at home and abroad in volunteer helping relationships as an alternative to military activity. Now, as she wrote him following his state-of-the-union message, she was delighted with Kennedy's proposal for a Peace Corps. For Franklin she had been a gadfly (some said gadabout), spur to conscience, and ombudswoman for the relatively powerless. Tentatively she began to renew those roles with the new President, urging a particular appointment to the head of the Children's Bureau, visiting him with a list of eligible women for appointments to the administration, pressing him in a letter on the need to protect impoverished American migratory workers, and asking him to make the administration more responsive to the plight of sick and disabled veterans. She found in Kennedy a sympathetic ear, in some ways perhaps more responsive than Franklin had been. The new President never wrote back that her position was politically naive, as Franklin sometimes told her. He met her requests for appointments whenever possible, and he wrote thoughtful, direct answers in response to her queries.

For Kennedy there were trade offs. He used the Lady well, appointing her to the National Advisory Council of the Peace Corps, as representative to the fifteenth session of the General Assembly of the United Nations, as the head of the President's Commission on the Status of Women, and asked her to join Walter Reuther and Milton Eisenhower on a private fund-raising committee that was to buy tractors to send to Cuba in exchange for the release of twelve hundred prisoners, a project that ultimately failed. For her readiness to serve, Kennedy was keenly appreciative.

By the spring of 1961, when Mrs. Roosevelt and I were seeing a good deal of each other (we were teaching a course together again), the relationship between the President and the Lady was blooming. Sometime in late winter or early spring, while eating dinner at my house, she glowed in her praise of Kennedy. She had particularly appreciated the kindness of the President and his wife in having her visit the White House. Impressed and delighted with the way Jacqueline Kennedy was redecorating the White House, she said something like "Franklin would turn over in his grave if he saw it, but I love it. He would never have let me do anything like that." (Not that she would have thought of it herself in those days.) The zest of the Kennedys impressed her, and she told happily of their tearing down walls in the White House, rearranging rooms, and putting in new colors. Kennedy was her young man now.

Driving her back to Brandeis, where she would sleep for the night, I could feel Mrs. Roosevelt become a little tense. "Do you believe," she blurted, "the stories they tell about Kennedy having mistresses in New York?" I said that I did not believe them. She came back emphatically, "Well, good, I don't either. People used to tell stories about Franklin, too." And then, almost as an afterthought, she mentioned, "With all those Secret Service following you around, it's a little ridiculous, anyway, isn't it?"

I remember how she used to say that the most important thing Franklin Roosevelt did was to give people hope. I think that was what she liked — the zesty, problem-solving, hope-giving approach to life that Kennedy's personality and convictions exuded. He was a life-affirming person who knew tragedy and felt irony but still cared.

She did not live to hear his American University speech in June, 1963, opening wide a route for negotiation with the Soviet Union, but she knew the way he wanted to travel. He wrote her in November, 1961, "I have no use for those who think that any negotiation is necessarily equivalent to appeasement." On Christmas he and Mrs. Kennedy sent Mrs. Roosevelt a telegram wishing her a happy Christmas and a good year to come. Then on January 23, 1962, he wrote a handsome three-page letter nominating Mrs. Roosevelt to receive the Nobel Peace Prize without telling her anything about it. In the spring he went out of his way to associate himself with her causes, promising a televised introduction to her presentation on TV concerning the status of women in the United States, and he made a tape for the Eleanor Roosevelt Cancer Foundation telecast for April 1. When she continued to press on the issue of employment opportunities for women, he wrote back on June 15, 1962, that he had directed the chairman of the United States Civil Service Commission to amend civil-service regulations to prevent federal appointing officers from listing positions for men only. By this time he was addressing his letters "Dear Eleanor." On the next day he sent another "Dear Eleanor" letter, this one two and a half pages, in response to her criticism against high-altitude atomic tests.

By late summer, 1962, she was not feeling well. Her bone marrow had lost the capacity to form blood. Kennedy wrote that he hoped she would be feeling herself again soon. By November she was dead of tuberculosis, which had been activated by the treatment with steroids for the bone-marrow failure. The President directed that the American flag be flown at half-mast at all naval stations, embassy legations, consular offices, and all U.S. installations. He also appointed a committee of 17 prominent citizens headed by Stevenson to create a living memorial for Mrs. Roosevelt and on April 23 signed a bill passed by Congress to charter an Eleanor Roosevelt Foundation, a singular expression of recognition to someone who had never held high elective office. ■

# Confessions of a New Semi-Capitalist

by Ted Gup '72



The mere mention of "business," like the sight of spinach, used to make me turn up my nose even though I recognized that, like the leafy green stuff, it supplied us with some much-needed iron. For me, and many of my generation, business was suspect.

Curious. You see, business runs in my family and was good to it. Grandfather Sam on mother's side was a millionaire. He owned a chain of stores, a factory and real estate. He so loved his work he died trying to beat a rising drawbridge on his way to the office at 94. Grandfather Sam on my father's side was a rabbi who read *The Wall Street Journal* religiously and knew the market like the Talmud. And my father had a men's wear store that in its bounty years allowed him and mother to visit Madrid and London, a testament to the Golden Age of Capitalism.

But something I saw or overheard (maybe while sweeping cuffs from under the tailor's press or stacking Levi's) helped me decide early on that I wanted nothing to do with this thing called "business." Though for years, I continued to be the willing beneficiary of this system I spurned.

It's puzzling how I and so many other sons of self-made men looking at an easier path before them could turn our backs on all that business offered. Perhaps it was how unevenly the largesse was spread around. I remember turning down a ride home from school in father's new Oldsmobile, conscious of classmates who wore shoes taped shut and skipped lunch. Too embarrassed to be grateful, I preferred the bus.

Whatever my feelings about business, I never felt above it. If anything, I wondered whether I could stand the regimen. Father was a study in sacrifice—75-hour weeks, fretting about predatory chain stores, wolfing down burgers at a Woolworth's counter, backaches from unloading crates. He died two months after turning 50 while on a buying trip to New York. Whatever fruits he enjoyed, he earned.

With his death, I turned away from business once and for all. But that was business with a small "b," the chain-smoking struggle of the little guy, my father, against the Big Boys. They were "Business" with a capital "B." Omnivorous, the Big Boys looked through the wrong end of a telescope onto a world of little people foreshortened by corporate self-interest. Their long shadows sent father's profits scurrying, embargoed manufacturers from filling orders for shoes and shirts and pants, and worried him sick.

Something Twain once said while sitting on the board of an insurance company comes to mind. "Ever since I have been a director in an accident insurance company," he told his fellow execs, "I have felt that I am a better man. . . . I look upon a cripple now with affectionate interest—as an advertisement." I wanted no share in such a vision.

As a student at Brandeis in the late '60s (following behind Angela Davis, Abbie Hoffman and instructor Herbert Marcuse) I saw my misgivings welded into political dogma. Father's business was slipping. On the wider screen, business was the bogeyman responsible for poverty, Vietnam and racism. Boards of directors were akin to the four horsemen of the apocalypse, gaunt riders swinging a scythe of destruction that mercifully continued to help subsidize my tuition.

From my vantage point in the dormitory, it seemed the business of America (with all due respect to Mr. Coolidge), was not business, but staying up nights arguing about what the business of America really was. I saw big business with all the dispassionate clarity with which the Ayatollah regards America. For authority I cited Marx, though I couldn't for the life of me get beyond chapter one of "Das Kapital."

Upon graduation I received a \$6,000 check from the Thomas J. Watson Foundation of IBM fame to write poetry and short stories in Italy. Not exactly what I expected from the sinister corporate world. My antibusiness bias had to carve out its first exception.

But this attitude of mine was not entirely of my own making. I simply learned too well the lesson my parents taught me—that business was what father did to enable his son to escape it. To stencil my name on the door under his would have shown a certain lack of gratitude.

Not so long ago I saw myself as a poet, and a rebel (who called home collect each Sunday night). Without really thinking where it might lead, I followed a fascination for words.

Today I'm sitting in a bull pen called a newsroom, a partially digested soul in the belly of a *Fortune* 500 company. True, I'm only a tiny tooth in an auxiliary gear, but I know somewhere upstairs it's linked to "Business," with a capital "B."

And while I may not be a wandering bard, things are not so bad as I might once have imagined. Friends and I comfort each other with assurances that we're not really in business. Reporters are merely spectators observing commerce from the sidelines, we tell each other. Perhaps.

But I sense a change. I find myself reading *The Wall Street Journal*. I catch myself eavesdropping on my wife's conversations with her business friends (God, did I really marry a financial analyst?), even piping in sometimes. (And note, not once have I heard her and her colleagues planning a coup in a Third World country.) She's management, I'm labor. (It seems that way around the house sometimes too.) But she's okay. That means carving out another exception in a quickly crumbling bias.

*Continued on page 31*





Atop a hill on the Brandeis campus is a research center with the mission of helping to guide American society toward bold visions of opportunity. The visions include adequate and affordable health care, effective programs for youth employment and retirement with dignity.

"Virtually every American is touched by the questions our faculty and students address," says Stuart H. Altman, dean of the Heller Graduate School for Advanced Studies in Social Welfare.

The Heller agenda addresses the problems of aging, children and families, mental retardation, prison overcrowding, alcoholism, employment and access to health care. Through research and administration, Heller faculty and graduates have had a dramatic impact on the nation's \$800 billion human services system. Altman was recently named to head a federal commission created to prevent hospital inflation from bankrupting the Medicare Trust Fund. Social policy leaders with roots at Heller are at state and federal agencies and colleges and universities from coast to coast.

Founded in 1959 with an endowed gift from Chicago philanthropist Florence G. Heller, the school this year is celebrating its 25th anniversary — an event marked by a \$1 million grant from the Heller Foundation. The gift will be used to establish the Peter Heller program for innovation in social policy, a program both unique and typically Heller in searching for new solutions to complex social problems.

Heller was founded as the only school concentrating on advanced, post-professional studies in social welfare. Twenty-five years later, says Altman, "the school continues to operate on the vanguard of many of society's most complex and pressing social issues."

Heller's quarter century of service includes more than 500 graduates, as well as the development of social policies and programs that enhance the dignity, independence and well-being of all Americans.

Heller "is very much product oriented," says Altman, and the \$5-6 million in new research and programs funded by government and private agencies each year reflects the confidence built by the school's product.

This summer Heller received a three-year \$4.9 million grant from the federal Health Care Financing Administration to help the government develop policies related to hospital reimbursement, long-term care and issues involving Medicare and Medicaid. Other recent grants include \$400,000 from the Macy Foundation to study problems of urban public hospitals and \$400,000 from the Pew Foundation to evaluate patterns in mental health care and costs.





With \$5 million in private grants and recent government approval, Heller is pioneering the concept of the "social health maintenance organization" — a single delivery system for health and social services for the elderly.

Under a variety of other grants, Heller faculty are evaluating the federal food stamp and supplemental security income programs, researching rural transportation problems, providing technical assistance and other support for youth employment efforts across the country, working on jail overcrowding and other prison issues in a dozen states and running training programs for private sector managers who administer employee benefits. The activities are diverse and range from a three-year project, funded by the Lilly Endowment, examining the life patterns of college educated women, to the recently launched center for social policy and management programs in Middle Eastern countries and a center for the theory and practice of social change.

*The Boston Globe*, in an editorial marking the 25th anniversary, noted "most student applicants who aren't admitted one year either try again or do something else, rather than go to another school."

Those admitted work toward a Ph.D. in social policy, planning and research or a master's degree in management of human services. What is offered to students, Altman says, is a sample of what they would find at business schools, schools of social work, public health, policy and public management schools — but nothing identical to any of them. "Brandeis has a tradition of not doing things other people are doing," says Altman.

*The Globe* editorial described Heller as one of the "brightest" resources for government, with "a phone number that pops up very often in state and federal offices when help or expertise is needed on many problems . . ."

In Massachusetts alone, Heller graduates and former faculty either oversee significant portions of the Mental Health Department, the Welfare Department, the elder affairs secretariat in the governor's cabinet and other government offices. Heller graduates can be found in federal agencies, overseas, and at more than 100 colleges and universities from UCLA to Harvard. Five graduates have become college presidents and 19 have gone on to become deans of social work and social policy schools.

One graduate, Richard Rowland, Massachusetts secretary of elder affairs, says Heller "has been a pioneer in bringing together social science learning and melding that with human values and the issues of government and public policy. Heller has concentrated on training people to think in terms of public policy issues and systems approaches, which are necessary to today's society."

"Social programs years ago were very small. But when you spend billions of dollars, you can't just consider politics and procedures. There are issues of budgeting and accounting and monitoring to see that the programs are really helping the people they were designed to help. Heller has been in the forefront of that."

Rowland adds that the people Heller attracts as faculty and students "combine intellectual and emotional commitment to help those in need," and the school itself "personifies the commitment to develop structures and organizations within society that help people cope and help each other."

Steven A. Cohen

# Helping Disadvantaged Youth

by Andrew Hahn



The long, hot months are over. City mayors can now look back with relief over a peaceful summer. Instead of the urban riots of the 1960s, nearly three quarters of a million of the cities' poorest and youngest citizens were productively occupied in newly created jobs and training programs.

The cities were quiet, but many disadvantaged youth were still without work. And three months do not make a year. The youth unemployment rate throughout the year is usually three times the adult rate. Youth between 16 and 21 account for over 40 percent of all unemployed Americans.

One 18-year-old dropout's story is typical: "I was going to school and they was passing me, but I wasn't learning much. I was there mostly, but it didn't seem to matter. Why study, when it wasn't going to help me find a job? Then when I quit school, I couldn't find a job anyway, so I stopped looking. I was lost and nobody cared."

Research being done in the Heller School's Center of Human Resources clearly indicates that youth unemployment has become increasingly serious among disadvantaged youngsters and that economic recovery is unlikely to solve the problem. Even the aging of the baby-boom generation will not solve the problem for many disadvantaged Americans.

The greatest problem is with high school dropouts who are two to three times more likely to be unemployed than high school graduates. Black males who are out of school and unemployed face the highest incidence of unemployment. In a typical month, fewer than one in five black teenagers were employed.

Andrew P. Hahn is assistant dean of the Heller School for Social Policy and Management at the University of Massachusetts at Lowell. He is also a senior advisor to the Department of Labor, Office of Employment, General and Community Development, the area of youth employment. He is co-author of a study on youth unemployment and the CET system, a mandatory work program for disadvantaged youth, published by the U.S. Department of Labor, Office of Employment, General and Community Development, in November 1979.

He is an advisor to a federal funding agency and to a Task Force on training for AFDC in Massachusetts.



Erik Butler, director of the Center for Human Resources and former director of the Vice President's Commission on Youth Employment, says, "What worries me is that a generation of young people are poorly prepared for the workplace. Too many students leave high school before graduation; both dropouts and graduates leave without the basic academic skills; teenage participation in crime is epidemic; and teen pregnancy is on the rise. Because of these problems, a growing number of teenagers may reach adulthood without ever experiencing a single day of work."

Robert Lerman, an economist at the center, adds, "The good news is how much is known about the causes, consequences, and cures for the problem of teenage unemployment. In recent years, the federal government invested billions of dollars in demonstration programs and research. We have been fighting an uphill battle to get this information out."

Why the concern of the Center for Human Resources over youth unemployment? Deteriorating labor market opportunities for teens hurt their future job prospects. There is widespread agreement, for example, that joblessness among teenage minority males leads to lower wages, perhaps 20 percent lower, as the males mature into young adults. Similarly, youth who work in high school tend to work longer per year and earn more once they enter the labor force on a full-time basis. Also, there are costs in social unrest and delinquency that result from a large pool of unemployed youth. While the causal connection is still debated, drug use, violence, crime and even youth suicides are associated with declining social economic conditions for young people. Next is the fact that many low-income youth must work to support themselves and their families when they could be in school or training programs. Finally, research findings show that young people who mix school and work make better career choices, and are able to function more effectively in an increasingly technological and competitive society. Many employer surveys indicate that it is the lack of

work experience and basic academic skills, not occupational skills, that is the principal barrier to employment.

It was six years ago that our group from the Heller School talked about the possibility of a new research program on the preparation of disadvantaged youth for the workplace. Several principles guided the early and continuing work in this field: first, the focus would be on low-income, disadvantaged youth. Most youth face difficulty making the transition from school to work. However, 10 to 15 percent of American youth suffer long-term, chronic unemployment. These youth are the minorities, the poor, the early school leavers.

Second, the work would focus on program interventions having tangible impacts on disadvantaged youth. We would concentrate on lessons from research and practical experience to document what really works in the youth field. Third, the activities would deal with several American institutions. We wished to see society get out of the "blame cycle" in which each institution sees the failing as someone else's. With 13 percent of all 17-year-olds nationwide classified as functional illiterates, we were convinced of the necessity of true partnerships — among schools, community groups, local and state government and employers. Fourth, our work was dedicated to assisting others to help themselves; we saw ourselves as facilitators.

We established the first national Youth Practitioners Network. The network is the only national group that brings together youth program managers from business, community groups and educational institutions. The groups meet either on the Brandeis campus, or regionally, and use the office on the Brandeis campus as a clearinghouse, where the effort is to match those with particular professional problems with those who may have solutions.

Finally, we sought to encourage a training system marked by stability and a greater sense of professionalism. To promote this goal we have engaged

in technical assistance to programs and grantmakers, dissemination of information, management training of practitioners, along with academic research.

Today, the Center for Human Resources (the product of a merger in 1983 between the Center for Public Service and the Center for Employment and Income Studies) is home to a Clearinghouse on Youth Employment. Funded by a consortium of national foundations, including the Charles Stuart Mott, Ford, Rockefeller, Taconic, Aetna, and Edna McConnell Clark Foundations, the center provides a variety of services to the foundations, their grantees, business groups, and to state and local managers of youth employment and education programs. This year, center staff will evaluate youth programs supported by two foundations in 10 communities and will provide intensive management training to local teams of private industry, school, and employment and training professionals from another eight cities. Finally, through articles, speeches, seminars, publications, and a toll-free line (800-343-4705), the center makes its research material available to youth employment professionals.

One project of the center is the Urban Network Project, funded by the Aetna Life and Casualty Foundation. According to Susan Curnan, Director of Technical Assistance, "The project's goal is promoting collaboration between industry and education in eight cities: Albuquerque, New Mexico; Cincinnati, Ohio; Dayton, Ohio; Des Moines, Iowa; Hartford, Connecticut; Oakland, California; Portland, Oregon; and Washington, D.C. The center combines its management training program with technical assistance, program evaluation, and research into a concentrated effort to support innovative work in these cities."



# Does Anything Work?

Two recent projects are underway for corporate clients. One project for IBM involves an analysis of the services provided and the populations served in 30 inner city skills training centers. A second project for a large supermarket chain seeks remedies to excessive turnover among young, entry-level workers.

In all of these activities, the center professionals utilize the research review recently completed. One book, *What Works in Youth Employment Policy*, numerous reports, articles, and media stories were written. These have established, for the first time, the information needed in this new field. This synthesis of knowledge in the youth employment field was mandated by Congress in 1977 and has been used directly by policymakers in Congress and by federal agencies.

Billions of dollars have been spent in the United States on the problems of teenage unemployment and preparation of young people for the world of work. And yet youth, like older people, are seen by society as either economic assets or liabilities. The comparison to older Americans is an appropriate one, since in a sense, young and old compete for scarce tax dollars.

But the unemployed of today can become lifelong dependent and unproductive individuals. The nation has the responsibility to provide this segment of the population with opportunities to participate fully in its economy.

Many of this nation's poorest young, eager to live productive lives, require our assistance. ■

The Center for Human Resource recently completed a massive research review of the entire scope of the youth unemployment problem and public and private responses.

A complex set of results emerged from the synthesis of the available evidence on youth employment programs. The following are illustrative of the results:

## Work Experience:

By itself, giving youth a chance to gain work experience in subsidized jobs did not make a significant difference in raising their employment levels. Although subsidized part-time and summer work influenced high school students in a positive way, these programs have done little to increase the attractiveness of disadvantaged youth to private employers.

## Linking Work Experience with Education and Training:

Providing jobs along with education and training did help youth from economically disadvantaged families. The largest CETA demonstration in 17 communities sought to link work experience with education and training. Those who participated got jobs on the condition that they remain in or return to school and maintain an adequate attendance and grade record. This approach achieved success in attracting low income dropouts back to school and in keeping low income students in high school.

## Intensive Skills Training:

Disadvantaged youth clearly gained from intensive training programs. The training and remedial education provided at the Job Corps residential centers proved effective in increasing earnings of participants. Outside of Job Corps, the value of training appears to vary with the specifics of the programs.

## Remedial Education for Basic Skills:

It is feasible to dramatically raise basic skill levels of highly disadvantaged youth through innovative remedial education programs. An experimental computer-based program within the Job Corps achieved marked success in increasing the reading and math competencies of poorly educated youth.

## Career Education Programs:

Exposing youth to information about and contact with a variety of careers did improve their knowledge about the reality of the labor market. Counseling, testing, and instruction about the world of work enhanced work-related attitudes. However, there is no evidence one way or another as to the ultimate value of such programs for raising employment and earnings.

## Education in Job Search Skills:

Teaching youth how to look for jobs and encouraging their efforts succeeded in moving young people into jobs. Participants in these programs learned to match their skills and interests with available jobs, to make contacts with potential employers, and to prepare for job interviews. However, the benefits appeared short-lived.

## Direct Job Placement:

Intensive job placement programs use professionals to find vacancies and send applicants to job interviews. Research indicates that these programs can be effective in shortening the time it takes disadvantaged youth to become employed. These low-cost programs, however, do not seem to have a long-run effect on employment or on the types of jobs held.

## Using Private Employers as Work Sponsors and Program Planners:

Programs to develop new careers and job ladders with private firms who traditionally do not hire disadvantaged youth had trouble recruiting enough employers to participate. However, among those that did, a large share became more receptive to hiring disadvantaged youth than they were before the program began. Businessmen helping plan government employment and training programs hardly altered the types of programs offered nor increased their hiring of low income youth.

## Subsidies to Private Employers:

Wage subsidies and tax credits to private employers can induce them to increase their hiring of disadvantaged youth. However, many eligible firms do not take advantage of such incentives. ■

# The New Family and Social Turmoil

by Janet Zollinger Giele

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Families were once considered havens of privacy, but in the last 10 years the family has been analyzed, dissected and discovered as an issue of public importance. The state of the family has consequences for the state of the nation. Are families doing a good job of raising children? Are they caring for their elderly members? What does the high divorce rate mean? What are the implications of the increasing number of female-headed families — 19 percent of all families in 1983? Are families contributing to the growth in public welfare costs and medical costs because they no longer can care for themselves but must have outside help to care for their dependent or disabled members?

These questions arise against a complex background of structural change in the American family. The middle class, or bourgeois tradition of a stable nuclear family, represents the ideal against which most current family life is compared.

The middle class nuclear family was solidified at the time of the industrial revolution. Its principal members were the husband/breadwinner, wife/homemaker, and several children. This model worked well for many farm and city families for nearly a century. Women's participation in the paid labor force was very low and existed only when there was no male breadwinner. Women's tasks were largely confined to the home but gradually broadened during the 19th

century to include volunteer and community activities. If women were employed, it was usually before marriage, and they withdrew from the labor force after marriage.

This middle class model of the nuclear family is still strong in people's minds although it does not represent the majority of family arrangements. Like John Stuart Mill who in 1869 held that the most suitable family arrangement was a division of labor "by which the man earns the income and the wife superintends the domestic expenditure," modern descendants adhere to this tradition. They claim that mode is one of the best ways to care for children, ensure stable communities, and prevent the homelessness, delinquency, and general social anomie that are threatened by what some fear is the current breakdown of the family.

Besides this nuclear tradition, other family forms have emerged that represent important alternatives. Both the New Right and feminists have made much of the fact that the so-called "traditional" nuclear family is now a distinct minority of about 12 percent of all households. This statistic is shocking because it is built on a misleadingly narrow definition of the "traditional" family (made up of a husband/breadwinner, wife/homemaker, and children under 18 years of age). Such a definition arbitrarily excludes husband-wife families without young children in the home (30 percent of all

households), husband-wife families with young children where the wife is employed (17 percent), and a very large proportion of households made up of a single person living alone (23 percent). The single-parent households, usually thought to be the strongest sign that the traditional nuclear family is breaking down, are still only a fraction of all households (14 percent). Given the current variety in family arrangements, it is apparent that no one family model is the dominant one. In fact, it seems likely that many people will pass through several of these forms in the course of a normal life cycle.

The current debate over the family pits the traditional nuclear family against all the others, which is neither realistic nor constructive. The prophets of family breakdown preach the bourgeois family model and decry freer sexuality, feminism, and easier divorce. Adherents to other family forms, however, see possibilities for new freedom and flexibility.

In the midst of this political and ideological turmoil social scientists are broadening our understanding of the range and variety of family life. Anthropologists and sociologists show us that around the world some families are extended; others nuclear. Some have women in the labor force; others do not. Some families (particularly in Asia) care for the older generations and have them live with



adult children. This pattern is less typical in the West, however, where the elderly desire to live close to relatives, but not necessarily with them. Historians, by studying birth and death records and census data on families in Europe and America have demonstrated that family life ebbs and flows in relation to famines, wars, and the economy. In hard times families are smaller, marriages occur later, and families may double up to share resources. In prosperous times individuals are more likely to marry early, have more children, and separate into larger quarters and single person households.

These scholarly studies are relevant to current public policy issues. Rising health care costs and a larger aging population, the emancipation of women, and the deinstitutionalization of the ill and retarded have produced social pressures on families that require a new kind of public response. The forces are larger than any one single family created or can handle alone.

Issues of health and general welfare that used to be considered the private concern of each family have now been laid at the door of public institutions. As a result, government budgets have risen so rapidly to meet pension and health care costs that lawmakers are searching for ways to shift the burden and the responsibility back to families again. The task is not easy, maybe even impossible. Let us consider some of the specific problems in meeting the needs of three dependent groups that have traditionally been the object of social welfare concern: the aged, the handicapped, and children.

### The Aged

Since the early part of this century, all major industrial countries have had some plan for Social Security or pension coverage to care for persons over 65. The widespread use of these social programs resulted not just from industrialization but from a growing population of older people. At the same time, families were no longer economically independent to insure provision for elders from farm income or small business. Country after country discovered the insurance principle as a way of covering the costs of supporting older people.

Recently in the United States, this system has come under a great deal of strain because of large numbers of persons over 65, generous cost of living increases in benefits, and expensive health care coverage that was added to the Social Security system under Medicare and Medicaid. As the public begins to consider how to cut these costs, particularly the costs of long-term care and support of the frail elderly in nursing homes, there are two logical ways to go. One is to lower the cost of care by direct approach to the medical profession and the health care providers. The other is to stabilize or expand unpaid care by relatives or family members. A variant on this second approach is to ask families to help pay more of the costs.

A few states such as Connecticut, Maine, and Idaho have instituted "family responsibility laws" requiring families, under certain circumstances, to pay for medical care and nursing home costs of older family members. While these laws have curbed gross abuses by well-off individuals, many observers believe that the family responsibility laws are retrogressive and that they will reinstitute obligations based on ascribed family membership rather than on individual entitlement and voluntary family support. This trend challenges the history of Social Security and old age insurance legislation that had gradually removed the filial responsibility clauses from the laws.

The current issue in family care of the aged is how to find an optimum partnership between family and public services. From a careful study by the General Accounting Office in 1977 in Cleveland, Ohio, we know that families provide a great deal of unpaid care to their elderly members. If an elderly family member becomes very frail, the amount of care the family provides rises to meet the need. At some point, however, the family's provision of unpaid care reaches a tipping point, surpassing the cost of nursing home care. At this point the individual is likely to be institutionalized. One of the key questions in care of older persons is how family support can be

supplemented in a sensitive way by outside agencies so that the family will not reach a breaking point and the person will not have to be institutionalized except under extreme circumstances.

A related question is what should happen to persons who do not have close relatives to care for them. Are there quasi-family relationships or family-like groups that could be set up in the form of congregate housing or other living arrangements to help older people give each other support and at the same time be economically viable? There is currently a widespread belief among welfare theorists and social planners that there should be a convenient way to permit people to live as long as possible outside of institutions, even if they have no family.

### The Handicapped

A similar concern surrounds the mentally and physically handicapped. In the past 30 years many public institutions that cared for the mentally ill and the retarded have emptied their beds and closed their doors. Mentally ill persons who once inhabited the back wards of mental hospitals have been returned to the community to live in halfway houses or with their families. Some find their way into the growing homeless population who wander the streets and eat in public soup kitchens run by churches and charities.

Retarded children who would once have been put in an institution are now kept in the communities and in their families wherever possible. In the last several decades, more children are being kept alive who might have died in an earlier time, with the result that greater demands are put on families for care-taking. As in the case of the aged, there is a question of how to keep the family from reaching a tipping point, or a breaking point, so that a child does not have to be institutionalized but can remain at home. Not only is home care less expensive, it is also believed to be better for the child who in the family will be treated more as an individual.

## Children and Teenagers

Concerning children, there is a new question about the relative responsibility of parents compared with that of school or other authorities. The current crisis in American education is largely blamed on schools and teachers, but there is also an underlying criticism of changing family life. Children, rather than doing their homework, may watch five or six hours of television a day. What is the family's responsibility for curbing their passivity and limiting their viewing? How much responsibility for directing their children should parents hand over to outside professionals? These are questions that Christopher Lasch raises in his critique of American family structure and American professionalism, *Haven in a Heartless World*. Lasch argues that families have given too much control and discipline to outside authorities and have been boggled by the seeming knowledge and scientific superiority of the psychologists, psychoanalysts, and sociologists. Rather than lose their authority, Lasch would have parents reassert their values and set limits for their children.

In some matters such as child care, however, families need more help, not less. As more women go into the work force and more families consider it necessary to have two incomes, and as more families are headed by a single parent, usually a woman, there is greater need for provision of child care both for pre-school children and older children after school. The need grows, but the supply of quality child care does not grow accordingly. A recent study by a Heller doctoral student Wendy Gray suggests that a substantial number of children aged 5-11 are now in "self-care," and another large group are cared for by siblings because parents find it difficult to locate convenient and affordable day care and after school programs. Despite these difficulties, however, the number of children in day care has doubled since 1960. Here again, in a family's care for children there needs to be a critical evaluation of the partnership between the family and the community.

## Women's Roles

At the nub of these questions of family responsibility for care of dependents, aged, handicapped, and young persons is the question of women's roles in the family. Who will be the caretakers? Who will be at the family centers of communication and be available to give care to the vulnerable and dependent persons who are in need? In the past, it has primarily been women who have performed these functions. Women, by their labor, helped to keep the costs down because most of their caretaking work was unpaid. Is it fair that this responsibility continue to rest so heavily on women and that they not be recognized or paid for it? If greater family responsibility for the aged, disabled, and the young means that more will depend on the unpaid work of women, is such a solution really viable?

Current studies of caretaking and communication among family members suggests that women indeed are the centers of communication — the kin-keepers. They, probably more than men, are sensitive to the physical needs, the minor daily ups and downs of dependent children and sick and older people. Alice Rossi, a prominent sociologist, describes the difficulty with which even the most egalitarian men are able to care for infants over any length of time. These men describe the activity as boring and unrewarding. They seem relatively insensitive to the small physical and emotional needs of the young child.

Heller doctoral student Jan Gibeau is examining the roles of women who are working and also caring for aged family members. She is interested in how the demands of caretaking affect a woman's job. What does she do when she needs to be at home rather than at work? How does a woman manage both types of roles?

It is an exciting time to be doing research in the area of social welfare and the changing structure of the family. Not only are new family forms forcing us to reconsider what is the typical family, but the growing entitlement programs and rising costs are forcing us to rethink our

traditional concepts of social welfare. Three major tasks lie ahead: public education, research, and policy analysis.

The first task of public education is one of changing American consciousness and awareness about the nature of the family. Social scientists and policy makers need to relocate the center of the debate over the family. The question is not how to preserve or go back to a traditional nuclear family ideal that now constitutes only 15 percent of all households. Instead, the important challenge is to broaden our laws and regulations to take into account the several stages and types of family and household arrangements.

The second task of research is to describe the conditions under which people at different stages of life live in families. Who takes care of whom? What family composition seems to be optimal? What are the financial arrangements? What is the division of labor? Under what conditions do families seem to be able to give to their capacity with minimum resentment and maximum pleasure? Where can services be made available to help families and not hinder their caretaking capacity? Answering these questions will help us devise more humane and efficient programs for delivery of services.

The third task of policy analysis requires that we review our existing programs critically to find where public regulations and eligibility provisions are actually discouraging families in their provision of care to dependent members. By contrast, other studies should be conducted to identify the best partnership between family help and outside help. Neither should some faithful and caring families be unfairly overburdened because they are willing to provide care. Nor should there be such easy opportunity for families to divest themselves of their responsibilities that there are perverse incentives to rely too easily on the public purse.

A key question for the future is how to devise partnerships between families and agencies that will sensitively cope with human needs. ■



# Safety Net for the Elderly:

by James H. Schulz

# How Well Does Supplemental Security Income Work?

*James H. Schulz, Professor of Welfare Economics and Director of the Policy Center on Aging, has published extensively on the economics of aging, including the books, *Providing Adequate Retirement Income*, and *The Economics of Aging*, recently revised in its third edition. He has*

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"It cannot possibly be the considered opinion of the majority of Americans that so many of those who in America are often called 'senior citizens' should be left in misery, squalor, and often forbidding loneliness. . ."

So wrote the well-known social commentator Gunnar Myrdal about 20 years ago. Since then dramatic changes have taken place. Today most of the elderly in America have modest but reasonable economic resources. For increasing numbers, retirement has become a period of challenge and enjoyment — not something to be dreaded and stoically endured.

Yet, even today, one out of seven elderly persons (3.8 million) have incomes below the official government poverty level. Poverty is especially high among elderly women and minorities.

When Myrdal wrote in 1963 about America's elderly, the situation was even worse. At that time about one-third of the elderly were living in poverty. It took major improvements in Social Security to change the horrible situation. Still, poverty for some continues.

Since the 1930s there has been a national safety net to help the destitute elderly. Old age assistance programs operated in all states until 1974. In that year, a new cash-assistance program for the needy aged, blind, and disabled went into operation. For the elderly, the Supplemental Security Income program (SSI) replaced federal grants to the state-administered old age assistance programs. The SSI program is financed from general revenues of the federal government and establishes national eligibility requirements for a guaranteed minimum income. In addition, states are encouraged (and some are required) to supplement the federal benefit guarantee with additional payments. The federal guarantee is currently \$5,664 for aged couples and \$3,768 for single individuals.



When SSI was legislated, its supporters argued that it would reduce many of the traditional problems associated with other programs to help the poor — that it would produce more efficient program administration, less stigma to recipients, and more adequate benefits using a national standard.

Despite major improvements in economic programs serving the elderly — especially in the area of pensions — over 1.5 million aged persons still receive “survival benefits” from the SSI program. Thus, the program plays a major role in providing income to the most needy of our elderly population. Now, 10 years since it began, it is appropriate to ask the question: how well is SSI working?

### The Unusual Origins of SSI

One of the most frequently voiced justifications for a program like SSI was the unsatisfactory nature of the highly decentralized network of public assistance programs originally set up under Social Security.

“The three state-administered grants-in-aid programs for the aged, blind, and disabled which SSI replaced were actually more than a thousand different state, country, and local welfare plans. Because responsibility was diffused, these programs created a bizarre patchwork of varying eligibility requirements, benefit levels, and miscellaneous laws that were both inequitable and unworkable,” wrote Gordon G. Chang in “The Supplemental Security Income Program: The ‘Revolution’ Needs Reform,” *Cornell Law Review*.

It would be wrong, however, to argue that SSI originated as a federal response to the inadequacies of these state programs and dissatisfaction with the variation and inequities among them. The establishment of a new federal program guaranteeing a minimum income to the aged, blind, and disabled came about in a much more indirect way.

Congress and presidents over the years have been sensitive to the problems of the “deserving poor.” And they were concerned especially about the elderly, given the perception that old-age politics had been a significant factor in past elections and could be important in future elections.

The federal response was not to focus on public assistance programs to help the needy. Quite the opposite. The focus was on the Social Security programs that were not means-tested. The desire was to liberalize, for example, old-age and survivors insurance, raising the living standards of the elderly while reducing the role of the less attractive “welfare” programs in the various states. The Social Security Old Age and Survivors Insurance program (OASI) was the cornerstone of those efforts. But as OASI was liberalized, a serious dilemma became apparent. The problem with a strategy of combining in OASI the objectives of both social adequacy and individual equity was that neither could be satisfactorily carried out because of the inherent contradiction between the adequacy and equity goals. As understanding and sensitivity to this dilemma grew, authoritative calls for dealing with welfare problems (social adequacy) outside of OASI were voiced.

Vincent and Vee Burke agree in their book on welfare reform (*Nixon’s Good Deed, Welfare Reform*, Columbia University Press) that SSI “. . . solved a problem for key politicians — the defense of the Social Security wage-related ‘insurance’ system against encroachments by welfare. . . . Social Security Commissioner Ball told the congressional tax writers [House Committee Ways and Means] that there were limits as to how far ‘they could go in making the Social Security system itself a complete replacement for an income-determined or means-tested welfare benefit without imperiling the wage-related and contributory nature of the system.”

When President Nixon initially proposed in 1969 his Family Assistance Plan, SSI as we know it today was not part of the package. Instead, Nixon recommended a new

“national minimum standard” to determine the amount of aid for the aged, blind, and disabled needy. But the standard was to operate under existing state programs and under the variety of state rules on eligibility and administration.

It was not until 1971, when the House Ways and Means Committee redrafted the Family Assistance Plan as H.R. 1, that SSI was created. Although hailed by a few as a revolutionary development in income maintenance policy, SSI won Congressional acceptance in 1972 with hardly any discussion and no floor debate. At the time, all the attention of Congress was on the Family Assistance Plan, which was hotly debated but never passed, and on major changes in OASDI (benefit liberalization and indexation).

### SSI — Ten Years Later

The experience with SSI to date has been mixed. Clearly SSI has helped more poor aged than the public assistance programs it replaced. Perhaps more importantly, it has raised benefit levels and provided more uniform benefits. However, for a variety of reasons, large numbers of people do not participate in the program. Currently 35 to 40 percent of the elderly eligible for SSI do not receive benefits.

Some have argued that “welfare stigma,” one of the barriers to participation, would be reduced significantly if the SSI program were expanded and replaced more of the “social adequacy” components of old-age insurance. However, even if the majority (or a large number) of the aged received SSI, stigma would remain. The many not in SSI, together with those who administer the programs, are still likely to take a negative, “second class citizens” view of those in the means-tested program.

Contrast the SSI participation problem with the popularity of OASI throughout the United States today. Overwhelmingly positive attitudes about Social Security have been revealed in countless opinion polls. In contrast to the negativism of many



toward SSI and welfare in general, 98 percent of those recently surveyed agreed that they would not feel embarrassed if their friends or relatives knew they were receiving OASI benefits.

Changes Are Needed

Few people today are likely to call for returning our public assistance strategy to what existed in the pre-SSI days. Without doubt, SSI is generally viewed as a step forward. But many would characterize the improvements as modest and urge changes in the program.

One frequently proposed change is modification of the SSI eligibility requirements. In order to qualify for SSI, there are two basic conditions that must be satisfied: (a) income must fall under the guarantee level after taking into account certain "income disregards" and (b) assets must meet a variety of asset tests. These disregards and tests were set up under the original law and have not changed much since then. The two liberalizations that have occurred are the exclusions from the asset test of (a) the entire value of an owned residence and (b) the value of a burial plot up to \$1,500.

While the federal SSI benefit levels have been adjusted annually by changes in the Consumer Price Index (CPI), both the income disregards and asset amounts involved in the eligibility test have not. The result is that as prices have increased over time, the unchanged disregards and asset test levels have become increasingly stringent. The table shows the original (and current) amounts and what these amounts would be if adjusted for changes in the CPI. Only the asset test for the value of an owned automobile has been increased by an amount keeping up with inflation.

A serious question arises in connection with the asset tests. Available statistics indicate that these tests deny benefits to many needy elderly — aged persons with low incomes and few assets. Why then do we have these tests?

"Testing" the assets of the poor arises from the fact that income alone is not an entirely satisfactory measure of economic status; well-being is also enhanced by wealth that can be converted to cash and thereby provide a means of purchasing goods and services. The principal arguments made in support of the asset test, therefore, are that it helps insure equity among individuals and that it insures that low income persons utilize alternative sources of support before receiving assistance from government programs. The test is imposed to keep down program costs, to target support to those with the most need, and to avoid the political embarrassment of providing benefits to the "Cadillac and mink coat needy."

Certainly assets can make a difference in the economic circumstances of an individual. But if assets are very important for some groups in the population, it is not at all clear that they are important for most people with limited income. Asset tests seem to be set up in conjunction with income-tested programs out of fear of political embarrassment from the rare exceptions. Moreover, historically there seems to be a strong element of

punishment associated with these tests. Individuals who need help are required to divest themselves of the security, self-respect, and consumption discretion arising out of savings. They are required to enter into a state of pauperization with all its negative aspects. This is done as a punishment for having to seek help from the rest of society and as a warning (and hence deterrent) to others.

The SSI assets test illustrates many of the challenges facing the program today. The test directly excludes many needy Americans who desperately need economic help. It indirectly discourages other people from participating because of its punitive nature and stigmatizing aspects. And it greatly complicates the administration of the program. It is these three issues — adequacy, participation, and efficient administration — that dominated the concerns of Congress when it passed SSI and during the program's chaotic years. These issues have not gone away and deserve again the urgent attention of the Congress if the poorest of our elderly are to receive the financial help they so desperately need. ■

Income and Asset Limits

	1974 Legislated	1984 Actual	1984 Indexed Amount <sup>d</sup>
Income Disregards			
Unearned Income <sup>a</sup>	\$20	\$20	\$39
Earned Income <sup>b</sup>	\$65	\$65	\$126
Asset Exclusions			
Overall amount individual	\$1,500	\$1,500	\$2,910
Overall amount couple	\$2,250	\$2,250	\$4,365
Automobile	\$1,200	\$4,500	\$2,328
Household goods and Personal effects	\$1,500	\$2,000	\$2,910
Insurance face value <sup>c</sup>	\$1,500	\$1,500	\$2,910
Burial	0 <sup>e</sup>	\$1,500	c
Home value	\$25,000 <sup>f</sup>	All	c

Source: Program statistics updated by CPI figures published by the U.S. Bureau of Labor Statistics

<sup>a</sup> Technically this disregard includes both unearned and earned income.  
<sup>b</sup> Fifty percent of earnings over \$65 is also disregarded.  
<sup>c</sup> Originally, if a burial trust was irrevocable or a plot was not legally salable, it was not considered by the Social Security Administration to be a countable resource.  
<sup>d</sup> Based on changes in CPI through 1983.  
<sup>e</sup> Not applicable.  
<sup>f</sup> \$35,000 in Alaska and Hawaii.

# Finding Ways to Finance and Provide Long-Term Care

by Stanley S. Wallack



Stanley S. Wallack directs the Health Policy Center at Heller. He was formerly deputy assistant director of the Congressional Budget Office, Health, Income Assistance and Veterans Affairs and worked for the Senate and House legislative committees on a variety of issues, including health care reform, Social Security financing, health delivery services and health containment.

National expenditures for long-term care have risen dramatically in the last 20 years. Between 1970 and 1982 nursing home expenditures rose over six-fold. The increases reflect the aging of our population and the more frequent use of formal (professional) as opposed to informal care. Since the problem has become acute, and will worsen in the years ahead, finding a more appropriate way to finance long-term care is becoming one of the most important health policy issues of our day.

About one-half of nursing home expenditures are paid for by the chronically ill or by their family. The annual cost of nursing home care is often between \$15,000 and \$25,000, which places a great burden on families. Medicaid, the federal/state program for the poor, pays for most of the other half of nursing home costs. Often it is an elderly widow, who has been a member of the middle class, that becomes impoverished by health costs and consequently a recipient of Medicaid.

Just as the general public is becoming increasingly aware of this financing problem, state Medicaid programs are taking steps to limit their expenditures. Furthermore, it is very unlikely that the federal government will move to fill the growing void in the financing of long-term care. Today, Medicare provides little in the way of long-term care and, with the large impending imbalance in the Medicare Hospital Insurance Trust Fund, its role in financing long-term care is not likely to expand.

By recognizing the limited growth in public financing, the focus of public policy studies has become the fostering of private sources of financing and efficient use of public and private dollars being spent on long-term care.



Since its inception in 1978, the staff of the Health Policy Center at Heller has spent considerable energy on achieving a better understanding of the long-term care financing and delivery problems and in developing innovative private/public solutions. One alternative, the Social/Health Maintenance Organization (Social/HMO), has received national attention. In its recent budget reduction legislation, the Congress has directed the Secretary of the Department of Health and Human Services to test the Social/HMO, referring to it as a Brandeis University demonstration project. Before describing the Social/HMO and another related research effort underway at the Health Policy Center, it is important to present the size and scope of the problem.

The "graying" of the American population is often discussed because the growing numbers will have significant effects on our society. About 25.5 million, or 11.2 percent of the U.S. population, were over 65 years of age in 1980. This number is projected to rise to over 35 million or 40 percent by the year 2000. More importantly for long-term care, the population with the greatest need, those over 85 years of age, are expected to increase by about 150 percent, from 2.3 to 5.1 million, over this same period. About one out of every three individuals over age 85 needs help in performing daily living activities. The comparable figure for those 65 to 69 is 2.6 percent. Often the care of the elderly is provided by spouses and families, particularly daughters. As more daughters enter the labor market, the need for formal care increases.

It is clear that the aging of the population implies an increased need for long-term care. For instance, if we assume the existing use patterns of nursing homes, the number of beds needed will have to grow by over 50 percent between 1980 and 1990. The elderly individuals needing these beds will usually be single or widowed women over 80 with limited income.

The public programs which support long-term care are usually welfare programs. Over 80 percent of public expenditures in 1980 came from income-tested programs (such as Medicaid and Supplementary Security Income) with Medicaid providing over 90 percent of the public dollars. But one of the more dramatic turnabouts in recent years has been the much slower rates of increase in Medicaid expenditures. Overall the annual rate of increase in Medicaid expenditures fell from over 17 percent in 1979-81 to less than seven percent. While the decrease in nursing home expenditures was not nearly as great, access to nursing home beds, particularly for Medicaid recipients, has worsened.

It is not reasonable to expect states to finance the growing long-term care needs. With Medicare being pressed to maintain its current support for acute health care, increased reliance on private financing seems inevitable.

#### Options for Increasing Private Financing

Today, 98 percent of private financing for nursing home care are direct out-of-pocket expenditures by the effected families. Private insurance pays for only one percent of nursing home costs. One result is that nursing home expenses represent the single most common cause of catastrophic health care expenditures for the elderly.

In the future, the elderly will have more financial means for paying long-term care expenditures. Higher social security payments, expansion in private pensions, increased savings, and greater wealth, mostly attributable to the value of their home, will all contribute to their purchasing capacity. Nevertheless, these trends will leave many elderly without the financial means to pay for their long-term care. The reasons are relatively straightforward. Many of those needing long-term care will

have very large expenses (\$10,000 to \$35,000 annually) and usually they will be older single women, over 80, who are many years past their or their spouse's retirement.

It is because of the catastrophic nature of long-term care expenditures that an insurance concept is attractive. If these costs could be pooled over the entire population, then huge expenditures would not occur for any one individual and, as a result, fewer individuals would be forced onto Medicaid.

Insurance arrangements are possible, but one obviously has to guard against adverse selection. If only individuals needing long-term care buy the insurance, we will not be pooling the risk. Having one chronically ill person paying for another chronically ill person does not provide the financial protection we need. There are ways to deal with adverse selection, such as funding the insurance before the onset of chronic illness or incorporating a benefit structure which is attractive to all the elderly. In addition to offsetting adverse selection, a comprehensive set of benefits could lead to the substitution of less expensive services and better coordination of services.

However, a broad-based program of benefits could lead to intolerable total costs as many individuals would want to use the covered services.

Limitations on use could be introduced by high coinsurance rates or by per capita payments to providers. The latter system, which combines financing and delivery, is more attractive in that it provides better budgeting and provides the greatest likelihood of efficient substitution.

To summarize, the financing solutions should incorporate:

1. insurance that would spread the cost and would limit catastrophic expenses for individuals;
2. wide scope of benefits that would encourage substitution of less costly services; and
3. per capita payment to providers to encourage efficient use patterns and to limit total expenses.

One organization that meets these criteria is continuing care or life care communities. There are about 300 of these communities in the U.S. today, many have been in existence for more than 20 years. They provide a wide set of benefits, including skilled nursing, housing, social services, meals, and homemaker services. Individuals usually move into their own residence in these communities when they are healthy and in their 70s, paying a substantial entry fee and then a monthly fee. If they develop a need for nursing care, they use the nursing facility on the continuing care campus. The community pools the financial risk for long-term care. In some communities all the risk is pooled, so that individuals pay the same monthly fee in the nursing facility as they did in their residences. In others, copayments exist.

A recent actuarial study found most of these communities in financially sound condition. However they may not be the choice of many of our elderly because they require a substantial payment, on average over \$40,000, and the individual must move into a campus environment. On the other hand, they are a good example of private long-term care insurance.

Two research and demonstration activities underway at the Health Policy Center are attempting to develop prototypes that will be available to a larger number of the elderly: the Social/HMO and the Continuing Care Plan.

### Social/HMO

The Social/HMO, a concept developed at Brandeis University, is a managed system of health and long-term care services geared toward an elderly client population. The Social/HMO will enroll a representative mix of people — from well to significantly impaired. Under the model, a single provider assumes responsibility for a full range of acute inpatient, ambulatory, rehabilitative, nursing home care, home health, and personal care services under a fixed budget. The Social/HMO is financed through monthly premiums paid by Medicare and by individual enrollees.

The Social/HMO which consolidates the system at all levels — provider, population, finance, and risk — can become an extremely powerful method. Consolidation of services makes it possible to redefine and coordinate provider roles and relationships, and to do so without some of the regulatory and reimbursement constraints that currently shape relationships. It also gives providers authority to manage care of individuals across the full spectrum of services. The balanced membership has an extremely important financial function in that it creates an insurance mechanism for long-term care through the premium. Prepayment and pooling remove financial barriers to innovation. And, finally, giving financial risk to the Social/HMO entity makes cost-effectiveness an important criterion for decision making.

Thus, the Social/HMO proposes solutions to the problems of health care for elderly. However, because of the limited size of the risk pool and the specter of adverse selection, the long-term care benefit for non-Medicaid enrollees initially will be limited.

Brandeis, together with the federal agency supporting the developmental activities, has selected four provider groups to test the Social/HMO concept: SCAN Health Plan (Long Beach, California), Ebenezer Society/Group Health Plan (Minneapolis, Minnesota), Elderplan (Brooklyn, New York), and the Kaiser Health Plan (Portland, Oregon). Three of the sites were to begin marketing in February 1984. However, the Office of Management and Budget held up the start of the program because it did not want to establish a precedent of having Medicare pay for long-term care services, even though this will be done at no additional cost to the federal government.

Because of the pressing need to develop new financing and delivery programs for the elderly using increased private financing, the Senate Finance Committee, and consequently Congress, adopted language authorizing this demonstration to proceed.

Because the Social/HMO is financed entirely from monthly fees and will be competing against health plans which offer no long-term care protection, it could not offer unlimited long-term care services. To do this within a competitive, voluntary system requires both a front-end payment and the ability to provide residential care for those no longer able to care for themselves. Building upon the principle of the Social/HMO and the success of Continuing Care Retirement Communities (CCRCs), the Health Policy Center together with five CCRCs in the Delaware Valley have been funded to develop and design a new concept, sort of a CCRC without walls. Termed the Continuing Care Plan (CCP), the system will provide comprehensive long-term care services. However, unlike CCRCs the individuals joining will not be purchasing housing. This will dramatically reduce the entry fee, which will be used almost entirely to prefund the expected long-term care services. A central facility will provide administration, social, and nursing home care.

The research project, which began in late 1983, has been analyzing the cost and utilization experiences of CCRCs. This has enabled us to separate housing, social, and maintenance costs from the additional costs incurred when nursing services are needed. These studies plus others on population, service, and pricing will allow us to develop alternative CCP designs. These alternatives then will be tested in a national survey. If the economically feasible designs turn out to be attractive to the elderly, the next phase of this research effort will be to help implement the concept in a number of communities.

The problem of inadequate financing of long-term care has been well documented; the solutions tried to date are few and not likely to meet the needs of most of our elderly. New approaches must be developed, implemented, and evaluated in as rapid a manner as possible. To do this requires the close working relationships of academic research groups and the provider and insurance communities. The Social/HMO and Continuing Care Plan are two examples of this partnership. ■



## Television as Art:

by Nancy Miller



Twelve fish tanks filled with guppies placed before 12 television sets playing video tapes of colorful guppies.

A cello constructed from three television sets showing both live and recorded images and intended to be played with a regulation bow.

Sets which disappear in darkness only to manifest 12 glowing shapes ranging from crescent to full circle, illustrating the phases of the moon.

A set where a tube has been replaced by a burning candle.

These are four video sculptures by Nam June Paik, on display now through October 14 at the Rose Art Museum.

Paik, considered the most influential video artist today, explores in his work the artistic possibilities of television. He uses a combination of live and recorded images, or technically manipulated sets, to create abstract patterns on screens. He also makes use of single monitors, or multiple arrangements of television sets. Even though Paik has been using this medium for more than 20 years, his work retains its aura of startling innovation and humor. Indeed, to many, television in a museum is not just surprising, but heretical.

*Nancy Miller is curator of the Rose Art Museum and organizer of the current Paik exhibition.*

## Nam June Paik's Video at the Rose

Throughout modern art, surprise and humor have gone hand-in-hand with innovation, leading the way for artistic breakthroughs that question established concepts and open rich territory for younger artists. In order to ridicule serious notions of what art should be, many artists have turned to ordinary objects to undermine convention.

In an unprecedented gesture, as early as 1913, Marcel Duchamp mounted a bicycle wheel upside down on a kitchen stool and called it art. The common object became art, and widened the path of artistic choices. In the 50s, Robert Rauschenberg stretched his quilt and pillow on a canvas frame and marked it with paint to create a work of art. Claes Oldenburg took the art world by surprise in the 60s when he exhibited a giant puffy hamburger made of canvas.

But shock and surprise also greeted new visions of subjects very familiar to the tradition of art. We forget that Monet shocked the art world with his views of light-drenched landscapes, and Picasso's transformations of women left spectators bewildered. In the end, these works have helped us see the familiar in a new way. This revolutionary vision so characterized the art of our century that it has become cliché.

Today if there's one item familiar to us it's the television set, and if there's one person who's helping us see it anew, both as an object and as a transmitter of information, it's Nam June Paik.

While television is commonly known as a commercial "mass medium," it is less known as a vehicle for artistic expression. For more than 10 years art museums have been organizing exhibitions in the new medium. The newly redesigned Museum of Modern Art in New York includes a room for video art viewing. Three public television stations — KQED in San Francisco, WNET in New York and WGBH in Boston — have established experimental workshops for artists. Many New York art galleries represent video artists. It is clear that video is the most recent medium to

enter the history of art, following photography and film earlier this century.

Paik both opened and led the way for the alternative television cause. In the early '60s, not yet thinking in terms of cameras and recorders, he disassembled and rewired 13 black-and-white sets. By manipulating signals, he discovered a limitless range of abstract effects. However, at that time, use of commercial television studios was too costly and there were no practical means to record his television works.

After several unsuccessful attempts to invent portable equipment, Paik bought Sony's first portable video camera-recorder in 1965. He taped the parade for Pope Paul VI who was visiting New York and that same evening showed the results to a cheering crowd at the vanguard Café à Go-Go in Greenwich Village. Announcing the release of video technology to artists, Paik proclaimed, "... as collage techniques replaced oil paint, the cathode ray tube will replace the canvas."

In the late '60s, Paik began a collaboration with public television. The programs for broadcast, although often shown in museum settings, are distinct from his video sculpture made for galleries and museums, and they comprise a separate chapter in his career. Because they reach larger audiences than the works for galleries, his single-channel tapes constitute some of his most impressive challenges to commercial television. His production, "Good Morning, Mr. Orwell," a New Year's Day success this year, was a live satellite-relayed program linking performances by international artists. It appeared on 90 percent of the public television stations in this country and claimed larger audiences abroad. Much to Paik's own pleasure, this program was even broadcast in Korea and, as a result, Paik is now considered a cultural hero in his native country.

Affiliations with public television have made possible inventions which have influenced his video sculpture.



One such invention, the video synthesizer, was a rudimentary early version of today's special effects generator. The video synthesizer made possible an array of shapes and colors, allowed for the superimpositions of images, caused images to vibrate, melt, even change colors. Most recently Paik has successfully used the laser beam in his art work.

However innovative his work has been, Paik's video art, like the work of the avant-garde in general, finds a lasting place in the cultural mainstream because it is based on firm artistic ground. The philosophical basis of his work comes from his early association with Fluxus, a group of international poets, performers and composers.

While a musician living in Germany in the late '50s, Paik experimented with tape-recorded "collage" compositions of real and recorded sound. Inspired by the vanguard leader of new music, John Cage, Paik and other Fluxus artists extended the arts to theatre, believing that, of all the arts, it held potential for reflecting the qualities and activities of everyday life. Paik staged live performances, or events, each a collage in which created sounds and actions were juxtaposed with those from life. Collage, the reliance on chance and the use of common objects, were common to Fluxus performances and the activities frequently had a humorous tone, reflecting the conscious attempt of the artists to pose a lively challenge to basic assumptions about art.

In the Fluxus spirit, Paik has been attracted to television both as a common object and because of its capacity to present a moveable collage. Paik's claims for television are no small ones. Utilizing this medium to merge art and life, he aims to release the potential of television to benefit society. This theme underlies his work and writings, establishing his extremely influential position in the contemporary art world, and giving him the deserved name of "video visionary."

The Rose Art Museum is particularly pleased to present Paik's work because it underscores Brandeis University's special bond with the artist. Through support from the Massachusetts Council on the Arts and Humanities New Works Program, Crimson Camera, and Sony Corporation of America, the Rose brings Paik's work to the campus for the third time, enabling the university to hold a unique place in the presentation of his work in each of the three decades of his career.

In 1964 when Paik relied on performance, or events, to express ideas, Alvin Lucier of the Brandeis music department staged a concert at the Rose. This was Paik's first participation with an American museum. Standing at the railing on the upper floor facing the entrance to the Rose, he suspended a Japanese scroll at a very slow pace over the railing down toward the pool on the ground level. After re-rolling the scroll, he hung it on the railing. He then took a fishing pole which was hooked to a noisy radio as its bait. The radio was then suspended toward the pool. While the scroll was saved, the radio met its fate with a plunge and gurgle. In his segment, Paik juxtaposed the meditative quality of oriental art and thought, with the boredom of American popular culture, symbolized by the radio.

In 1970, Paik's inventions with television were a key contribution to *Vision and Television*, organized by the Rose. This was the first museum exhibition devoted to illustrating the potential of television as an art form. This landmark show, organized by Russell Connor, proved to be an unprecedented and enterprising effort to launch television as a creative medium worthy of art museums.

In an effort to shake viewers out of passivity which had dulled them to commercial fare, Paik allowed the spectator to interact with the medium in a "participatory" work titled *The 9/23 Experiment*. An artist-in-residence at WGBH-TV at the time of the show, Paik used the WGBH mobile unit to make visitors subjects for the camera, surrounding them with 30 color monitors on which they

could see themselves transformed by video effects, feedback, and modulation.

However, even more memorable was the performance of Paik's *TV Bra for Living Sculpture*. Though now a classic in the history of video art, this event maintains its aura of innovation and humor. For this event, the avant-garde cellist Charlotte Moorman, who had appeared in numerous performances of Paik's, wore a "bra" of two three-inch television sets. During the event, Moorman played cello compositions by Paik and other experimental composers. As the sound of her cello changed, so did the image on her *TV Bra*. By transforming the objects of television monitors into a common object of clothing, Paik jolts the viewer into seeing both objects in a new way.

Through his career, the notion of time has been of central importance to Paik. As a composer and performer, he defined music as events in time, structuring his activities according to time durations. The time factor is central to video's uniqueness. Live video can show real time, video recordings demonstrate representational time, and time can be altered by the hands of the video artist — slowed or sped, erased or preserved forever. The beauty of this aspect of the medium is reflected in the title of Paik's exhibition at the Rose, *The Color of Time*. It is also an appropriate title since Paik, who values the relationship with the university which has evolved over the years, presents not only three new sculptures, but a selection of the work he has made since his last appearance at Brandeis.

On opening night, September 6, of *The Color of Time*, the Institute of Contemporary Art in Boston presented three new video installations by Paik. And, WGBH-TV will air, throughout the duration of the exhibition, a retrospective of the programs Paik has produced for broadcast. The three events will celebrate the work of an artist whose art touches and transforms daily living. ■



# The Three Chapels as Symbols of Peace

by His Eminence,  
Cardinal Jaime L. Sin  
Archbishop of Manila



*Commencement: Lew R. Wasserman, chairman of the Music Corporation of America, author Isaac Bashevis Singer and Cardinal Jaime L. Sin of Manila are seen above during ceremonies granting them honorary degrees. Also honored were former U.S. Senator Jacob Javits; Henry Rosovsky, former dean of the faculty of arts and sciences at Harvard; biochemist Mildred Cohn; Clifford Geertz, professor of social science at Princeton University; Attorney Arnold Cutler and Robert Morris, professor emeritus at Brandeis' Heller School.*

*Excerpts from the address delivered on the occasion of the conferring of a doctorate in humane letters by Brandeis University on 20 May 1984*

I come to your midst, a pilgrim priest from a distant, troubled land. That Brandeis University should have thought of conferring an honorary doctorate degree on the Archbishop of Manila, whose pittance of wisdom is reported to consist more of humorous parables rather than theological treatises, is indeed a cause of bewilderment for me. That this academic act should align me in the distinguished company of past recipients like Prime Ministers Golda Meir and David Ben Gurion, President John F. Kennedy and Richard Cardinal Cushing—further increases my uneasiness. I finally found some tranquility in the thought expressed by one of your Board of Trustees (Congressman Stephen J. Solarz) that, more than honoring me, this conferment does honor to the people of my country, the Philippines.

The sculptor, Elbert Weinberg, placed at the entrance of your Jewish Chapel, a representation of Jacob wrestling with an angel. Before coming here, I too, had my moments of wrestling with the angel of doubt. It was a perplexity that covered not only the choice of a relevant topic but the efficacy a voice from the Third World might expect when addressing an American audience.

For, to come to America is to be overwhelmed by her immensity and complexity. It is to experience her vastness geographically, in the magnificence of your plains and mountains; it is to experience her progress technically, in the dramatic achievements of your sciences; it is to be dazzled culturally by the creativity of your arts and literature.

Here, a traveller from an Asian village could easily feel his smallness and insignificance, while realizing furthermore, that the inevitable companion to this preeminent progress is power—the power economically to render him poorer or richer; the power politically to support or to destabilize governments abroad; the power technologically to enrich or to totally destroy our planet.

Underneath the awe and fear one has before the mighty presence of America, are many questions, such as: does America, in spite of the bigness of her industries, the bigness of her military forces, the bigness of her financial resources, still possess an understanding of the abject misery that poverty inflicts on millions of human beings?

Can America, in spite of her tremendous material achievements, still have the heart to empathize with the hunger for justice and freedom felt by millions of small farmers, small fishermen and laborers? Does America continue to preserve the memory of her early history when she was sanctuary for men and women fleeing persecution and oppression?

Today, I am glad to come to a part of America that recalls the "little republics" of your early town meetings, where the life of citizens was exercised on a human scale, where people could come together and personally participate in the building of their community, establishing associations that developed through bonds of trust and affection.

For Brandeis makes America comprehensible.

It is easy to remember the poor while in Brandeis where the architectural restraint and unpretentiousness of the Three Chapels reflect the asceticism and humility of the world's poor.

It is not strange to talk of the poor while on this campus, since the great jurist whose name this university proudly bears was a courageous defender of the poor and the oppressed. One recalls that Justice Louis D. Brandeis was called the "People's Attorney" because of his many legal battles on behalf of small businessmen, organized labor and consumers against the industrial giants of his age. The protection of the poor against the "curse of bigness" was a primary concern of Justice Brandeis whom President Franklin Delano Roosevelt affectionately called: "My dearest Isaiah."

We need not review the already familiar statistics of misery and hunger endemic to the poor, the harshness of whose lives undermines the twentieth-century dream of creating material abundance for all. The year 2000 will most likely have for its first historical scenario, the picture of widespread food shortages among the peoples of the South, while the North enjoys an even higher level of prosperity fueled by an ever insurmountable technological advantage.

But to dwell mainly on the material dimensions of poverty is to invite despair and disunity. The challenge of poverty needs to be expressed in a profoundly spiritual sense by urging the wealthy and the powerful to look into their innate capacity to understand the sufferings of the poor. The paramount spiritual task of the rich is to overcome their scandalous separation from the suffering part of mankind.

Human life—how precariously it clings to a planet that has become one great arsenal of destruction. Realizing the need to join every effort seeking to protect the gift of life, we gave our fraternal support to the 1983 pastoral letter of the Catholic Bishops of the United States, entitled: "The Challenge of Peace: God's Promise and Our Response." We were especially interested in the pastoral's views on the value of nonviolence, since this option has recently surfaced in the Philippines.

Human life and its extermination was the final solution adopted for six million Jews in the death camps of Hitler. The insane tragedy of the Holocaust now impels Jews and Christians alike to shout, "Never again!" to all repressive forces that manipulate, subjugate and finally eliminate the weak and the defenseless.

Yet, because the barbaric underside of mankind waits for any opportunity to unleash its savagery against a passive people, we must maintain our vigilance constantly and courageously.

Whenever the freedom and rights of men and women are sacrificed in the interests of national security, the abomination that was Auschwitz once again casts its demonic presence.

Whenever the international economic order ignores distributive justice and creates greater unemployment and poverty in the Third World, the adoption of another efficient version of the Final Solution against millions becomes another grotesque possibility.

Our vigilance is all the more necessary since those who design economic policies devoid of social justice and who go about militarizing government machineries behind the facade of law and order, are individuals whose outward demeanor and motives are just as ordinary, just as rational and neighborly as the dutiful Mr. Eichmann.

It was Barbara Ward who once said that our world, with its science and technology, with its instruments of total destruction, can still set the process in reverse and create a world in which the Divine can break through to our human state. It was this vision to help make this world a place in which the Lord and his creation could happily dwell, that finally became my principal motive in coming to Brandeis.

For it was in the preparations for my visit here that I first came to know the thoughts and writings of Justice Brandeis. It was this Justice whose brooding eyes and craggy face reminded onlookers of a Hebrew prophet, who championed the cause of the poor, considering too great a concentration of power as a menace to a free society. His work for the Zionist movement was thoroughly American in spirit, based as it was on the right of small nations to shape their own destiny and for their people to live freely in their own homeland.

I also learned that Justice Brandeis did not limit himself to propounding legal theory. He was above all a practical man who could be deeply moved by the apathy and slowness of people in the face of recognized wrongs. It was Justice Brandeis who helped found in 1900 the Public Franchise League which resisted long-term exclusive franchises of public utilities in Boston. He was counsel for life insurance policyholders, devising a savings-bank insurance plan as a means of security for wage earners.

This is familiar biography for you; for me, however, they are a confirmation in hope. For Brandeis, the man and jurist, is gone. But the University that carried his name and tradition remains. Here, among you, I sense the resolve to continue the life quest of Louis D. Brandeis for an enlightened world freed from all forms of injustice and oppression.



# 1984 and Brandeis

by Dennis Michael Kelleher '84

I, therefore, humbly urge you to continue placing the richness of your intellectual resources at the service of practical programs designed to help poor students receive an education in democratic principles and life; to help Third World faculty redesign law and legal systems to promote human-oriented needs; to strengthen international organizations and private voluntary agencies that seek ways of inserting moral values into the framework of social, economic and political institutions.

Through such unremitting efforts, we bring about oneness between Brandeis and the Philippines, between Brandeis and the poor of this world. Peace enters our planet through such small beginnings.

My friends, at the Funeral Mass for the assassinated Senator Benigno Aquino, I depicted our people as a pilgrim nation whose Promised Land of freedom and justice still beckons far beyond the desert's horizon. Our poverty is like a roaring lion devastating our countryside and devouring our youth. The lack of truth and freedom is like dried-up streams that can no longer quench one's thirst; the injustice of our system is like a plague of locusts tormenting our daily lives.

Yet, I make my journey back home armed with that hope which my Brandeis visit renewed in me. If here on your campus, diverse faiths can live in fraternal coexistence and amity, then, mankind's eventual reconciliation with God and each other can indeed become a reality.

Let me, therefore, now thank you—as a priest (who echoes Cardinal Cushing's insistence that his own theology had barely gone beyond that taught to children in catechism class)—for the great honor this conferment bestows on me and my countrymen.

Let me thank you—as a friend, who recalls what President Abram Sachar of Brandeis said of those who enter the Three Chapels, that there “only the hearts need speak.”

As I bid you farewell, my heart speaks to you:

Peace! Shalom! ■

Nineteen-eighty-four is a year that is unquestionably pregnant with meaning: It is the 30th anniversary of the Supreme Court's *Brown* desegregation decision, the 20th anniversary of the U. S. Civil Rights Act outlawing Jim Crow practices, and the 10th anniversary of the only U. S. president forced to resign office in disgrace. Moreover, these events contain, like bookends, years that are littered with almost incomprehensible disorder and confusion: U. S. involvement in the Vietnam war escalated as did the massive protests against it; the assassinations of President John F. Kennedy, Martin Luther King, and Robert Kennedy punctured the years; and, although less violent, no less revolutionary, the women's movement sought long overdue justice.

But, in spite of these and other momentous events which both formed and informed 1984, what has consistently monopolized attention regarding this year has been George Orwell's novel *1984*.

There remains, however, a great deal of misunderstanding about both Orwell and *1984*. Notably, although seemingly forgotten, *1984* has much less to do with 1984 specifically than is often believed. It is important to understand that, as manifested by his arbitrary selection of the date (merely inverting the last two digits of the year he wrote in), Orwell did not look ahead, from 1948, to examine society in 1984. Rather, he looked at the circumstances of his own day coupled with his understanding of man's nature and wrote about *one* set of implications for the future. Nor, as is often believed, did he write a vision of the future as much as a warning for his own time, a warning that has as much relevance today as it did then.

Orwell accurately identified what was, and assuredly will remain, man's central problem well into the future: the possibility that an essential ingredient of humanity might be displaced by the pace of technological change. He alerted the world to the struggle of mankind fighting to keep humanity from being overwhelmed and overshadowed by what passes for progress; he feared a technological totalitarianism that denied human dignity and human worth. Mankind, far into the future, will still be attempting to temper progress with human concerns, and the threat of replacement, indeed annihilation, will remain man's ultimate challenge.

The future may well include unimaginable advances in biotechnology and genetic engineering, space travel, telecommunications, robotics, microelectronics as well as many other futuristic changes that subtly seep into society's complex and rapidly expanding technostucture each day. Yet, the human dimension of life, the non-replaceable foundation for any progress or change, will remain both the most important and the most fragile aspect of the future.

The centrality of man and the primacy of human dignity are continually eclipsed by the vastness of modernity which tends to marginalize man. However, the ominous possibilities for the future, and the daunting challenges facing mankind, have a corresponding hope and promise which primarily arise from the malleability of the future. As Orwell recognized, the future would not arrive as a completed package one day — rather, the foundations of the future were the present, which had encoded in it several markedly different futures. The future that would result was being incrementally formed each day as thousands of small actions of women and men invisibly coalesce. It is those actions, the influence of human intervention, that are the hope for mankind because, as Orwell knew, change is certain, but progress is not.

As progress inevitably propels us into unknown areas of knowledge and change, a humanistic vision will become increasingly important. A liberal arts education, centrally focused upon the relationship between man and his world, is an essential aspect in insuring that the future will incorporate human dignity and assert human worth.

Technological totalitarianism and calloused consciousnesses will continue to assault mankind and attempt to usurp man's central role in society, but a liberal arts education underpinned by a humanistically focused mind will remain a bulwark against such regressive forces.

We here at Brandeis are given an education imbued with a humanistic perspective and a belief in the capacity of man to influence the shape of the world. From Justice Brandeis, who dedicated his life to justice and humanity and who was a significant force in shaping the world in this century, to all those who have labored in the service of an idea of a university that nourishes humanistic understanding and inquiry, Brandeis University is a testament to the possibilities of man.

Indeed, from the university that sent the single largest number of students South during the Mississippi summer voter registration drive in 1964, and from the university that was the SDS national strike headquarters organizing mass demonstrations against U. S. involvement in Vietnam, to the less noticed but equally important issues of today, the students here have a heritage of activism, commitment, and social caring unmatched by other universities.

The very foundation of Brandeis is built upon people, men and women, who believed that a vision could be fulfilled, that things could change for the better, and that people with faith could change them. It is as ironic as it is significant that faith, courage, and commitment founded Brandeis in 1948, the same year that Orwell warned of a future careening out of man's control.

Thus, Brandeis demonstrates that while Orwell's warning might remain as man's paramount threat, his solution will remain man's best response: defeating totalitarianism tomorrow, technological or otherwise, begins today with each action that identifies and defends humanity.

The real learning at Brandeis has been to instill a predisposition to compassion, humanity, and an openness to the needs and worth of others; it is this that I and other graduates carry in our hearts and heads, knowingly or not. The banner of Brandeis is animated by justice, equality, and human dignity and will always serve as a barrier against those forces that seek to displace and replace man as the central agent in society. It is this education, one that places human concerns at the apex of a hierarchy of values, that will enable man to shape a society consistent with those humanistic values.

The heritage of Brandeis' education has disallowed our mortgaging our morality for self-interest or expediency. In a world of continuing turmoil, tension, and change, Brandeis will undoubtedly remain a beacon of courage, faith, and hope far into the future, increasing the likelihood that the dignity of man will be preserved and that an Orwellian world will continue to be no more than fiction. ■

*Dennis Michael Kelleher graduated last summer Phi Beta Kappa, Magna Cum Laude with highest honors in politics and English. He received the Milton Sacks Politics Award and the Lester Martin Legal Studies Award. He is attending Harvard Law School.*

*Continued from page 11*

It's true I'm thinking IRAs, investing in the company's pension plan, and taking back stock. (Does that make me an accomplice?) Once, in a moment of weakness, I felt myself rooting the company on, me a one-time radical with thinning hair and a question thickening in my throat. What's happening? Am I selling out?

Maybe I can write it off (Now look who's using business talk) to age and changing needs. The last cinderblock bookcases have been dragged from the house. The jacket once worn at the barricades where I stood against Big Business and Imperialism is this year's charitable deduction to Goodwill. And the last of my Brandeis classmates has graduated from the FBI's Most Wanted List. Tempus fugit.

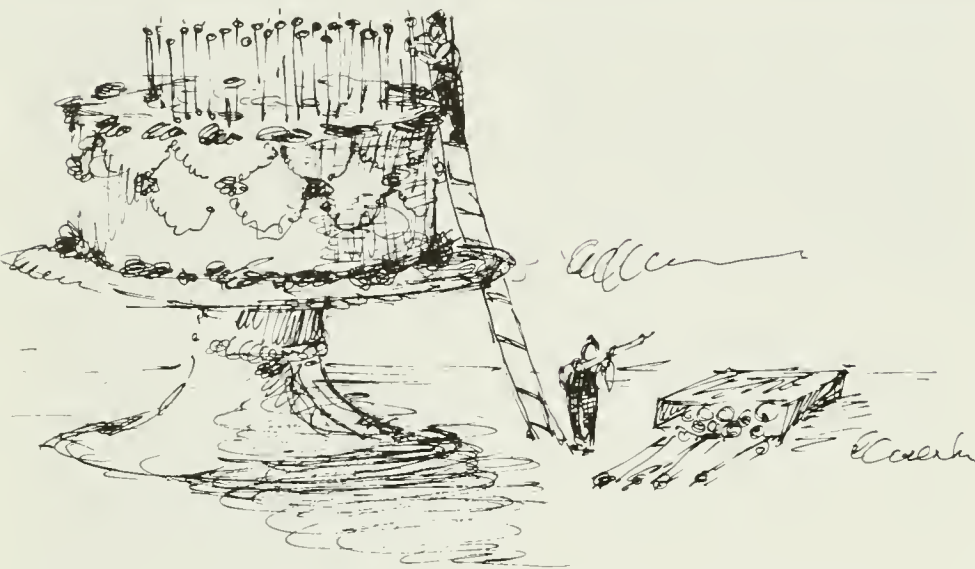
No, I'm not ready for the boardroom yet. I still get worked up over stratospheric profits. (Would I be more forgiving if the miscreant were in my own portfolio?) Mention black lung, acid rain or oil spills and the old ague returns, though less virulent, less mired in rhetoric.

Fact is, I am still somewhat suspicious of business, its motives and its methods. But I also have a nettlesome fear that I am a victim of my own passions and perceptions. I want to know about what I have missed, a simple thirst to understand what business is, be it with a big or little "b." Now look what I have done. Today I asked my wife to subscribe to the *Harvard Business Review*, even suggesting we write it off. I'm lost for sure. Who knows what's next? Maybe I'll even like spinach. Never. ■

*Ted Cup is a reporter for the Washington Post where this article appeared originally.*



by Zick Rubin



During the past few months I've started seeing things a new way. Until now, I viewed the age of 40 as one of life's turning points — the end of (sigh!) young adulthood and the start of (oh, well) middle age.

Until now, it seemed a natural line to draw. Men and women in their 20s and 30s were always being called "young Turks" or "young lawyers" or "young executives." Once they hit 40, they were no longer called young anything.

Not long ago, I read a book review that concluded, "It is the richest and most expert novel in my recent reading by any writer now under 40." No one ever commented about the universe of writers now under, say, 44.

The "boyish new president" of Swarthmore College is 39, the newspaper reported recently. If the man were 40, he might still be new but he'd hardly be boyish. When a United States Senator from

Massachusetts decided this year not to run for re-election, a gaggle of congressmen and state officials pushing 40 fell over each other to announce for the nomination. If they ever wanted to be a "young senator," this was their last chance.

If I ever had any doubts about the importance of age 40, I could scan my bookshelves and see titles like "The 40-to-60-Year-Old Male," and my doubts would be resolved. When Jack Benny decided to stay 39, he had a reason.

But in the last few months, in a textbook example of what the psychologists call selective perception, I've noticed that the boundary between "young" and "old" has begun to creep upward.

The signs are all around, if you only look for them. Take the world of scholarship, for example. It used to be clear enough that as you rounded the corner past 35, your days as a "young scholar" were numbered. But in a campus newspaper I read an item about "20 young scholars who have been chosen to write 'The Cambridge History of American Literature.' The contributors all are under 45 years of age." There, above the headline, are photos of two of the "young scholars" — balding and gray but still in their youthful mid-40s.

Or take baseball. We always knew that by the time a ballplayer reached 40, with the celebrated exception of Satchel Paige, his playing career was over. But now I see Pete Rose getting his 4,000th major league hit on the eve of his 43rd birthday. And there was Phil Niekro pitching the Yankees to victory in their home opener, at the age of 45.

When I stopped to do a little library research into the matter, I discovered that the changing boundary between youth and middle age has even gained official notice. In the recently published "Yuppie Handbook," it says in black and white that a Yuppie (short for Young Urban Professional) has to claim to be between 25 and 45. The Yuppie role models are people like Woody Allen, Jane Fonda and Ralph Lauren — all perceptibly past 40.

Then it dawned on me in a flash of insight that somehow eluded me until now that we had an undeniably young candidate for President earlier this year — *no way* that anyone could have called the lean, rugged guy with the cowboy boots and the new ideas middle-aged — and he is 46 or 47 years old.

Now that I've spotted this new trend, it's easy to come up with a compelling demographic explanation for it. After all, we live longer than we used to, we marry later, we have children still later and we change careers more often. No wonder it takes us longer to get to the middle of things.

And so, as I settle into my 41st year, I realize for the first time that middle age no longer begins at 40. It begins at 47. Or possibly 48. ■

*Zick Rubin is Louis and Frances Salvage Professor of Social Psychology. This article was printed, in a slightly different format, on the op-ed page of The New York Times.*

#### Editor's Note:

"View From Boston Rock" will be a regular feature of the Brandeis Review. Articles of a less-than-cosmic nature may be submitted to the editor.

## Candidates Sought for New Position of Vice President for Alumni Affairs

A search is currently underway for a Vice President for Alumni Affairs, a newly-created position designed to increase the involvement of alumni in the university.

The vice president will initially report directly to President Handler and ultimately to the senior university officer for development.

The new position is the second major move the president has made in recent months to expand the role of alumni. Evelyn S. Simha '52 earlier had been appointed as the first executive director of the Alumni Admissions Council.

"I have met with our alumni throughout the country during this past year and it is clear to me that they are extremely proud of Brandeis and want to participate more in their university," Handler said.

"The alumni are an integral arm of the university and it is imperative that we develop more programs of intellectual and social content for them as well as involve them more in the life of Brandeis," she added.

"Our alumni have 'come of age.' They deserve a greater voice in the university as well as a share in the responsibility of strengthening the institution."

The new associate vice president will be responsible for expanding reunion and homecoming events; developing programs which will bring alumni back to campus for weekends during the summer and school year, and increasing the number of alumni chapters and class organizations throughout the country.

Other duties will involve administrative and budgetary management of alumni activities and programs, alumni records, publications, and supervision of staff.

Alumni Association President Paula Resnick '61 said she was "absolutely delighted with President Handler's decision to expand the influence of the alumni. This is a very positive and much needed step."

Gladys Jacobson, the executive director of the alumni association, will assume full-time responsibility for the Alumni Fund when the new vice president is selected.

"I am pleased Gladys has agreed to devote all her efforts to this critical responsibility," Handler said. "The growth of the Alumni Fund under her leadership has made it necessary for her to spend all her time on this activity." The Fund is expected to raise about \$1 million in the 1984-85 fiscal year.

Handler said she "encourages appropriately qualified" Brandeis graduates to apply for the new associate vice president's position. Resumes and covering letters should be sent to John Hose, associate vice president for university affairs.

## Endowment for Undergraduate Education Established

The establishment of an \$800,000 endowment to strengthen undergraduate education through the improvement of curriculum and instruction was announced recently by President Evelyn E. Handler. The program was initiated by a \$200,000 challenge grant from the William and Flora Hewlett Foundation of Menlo Park, California. The grant will support an endowed Presidential Discretionary Fund.

"The establishment of the discretionary fund is the first step in providing a framework for the thoughtful and innovative change necessary to maintain our academic excellence in the years ahead," said President Handler. The following priorities for the fund's income have been set:

- improvement of instruction in the freshman year; specifically the teaching of foreign languages and elementary mathematics.
- an examination of the role of computers in the teaching of social sciences.
- development of an archival storage and retrieval system for the creative arts.
- an evaluation of the present undergraduate advising system, devising ways to make it more effective.

The Hewlett grant, which requires that the university raise matching funds on a three-to-one basis, will result in an \$800,000 endowment. Already, \$50,000 has been raised toward the challenge grant from the Surdna Foundation in New York, \$100,000 from the Booth Ferris Foundation and \$60,000 from the Arthur Vining Davis Foundations.

## Crawford Named Athletic Director

Charles L. Crawford, former director of intercollegiate athletics at SUNY-Brockport, took over as director of athletics in July.

Crawford served as a NCAA Division I football official, head basketball coach at Queens College, and freshman baseball coach at the University of Maryland. He led the athletic program at SUNY-Brockport when it won four NCAA national championships.

He holds an Ed.D. from New York University; an M.S. from the University of Maryland, and a B.A. from Manhattan College.

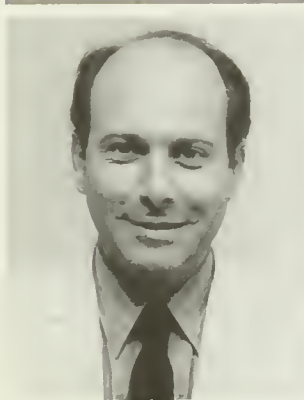
## Founding Trustee Ford Dies at Age 93

Founding Trustee Joseph F. Ford, one of the guiding spirits behind the creation of Brandeis whose philanthropy touched people throughout the world, has died at the age of 93.

Mr. Ford, who emigrated from Russia in 1910 in search of the education denied him in his native land, became one of the seven original trustees who founded Brandeis in 1948. He remained an active trustee for the rest of his life.

The longtime resident of Brookline, Mass. was the founder of the Ford Manufacturing Co. of Boston, a clothing firm. He was passionately devoted to many charitable and civic causes and was described in an honorary doctor of humane letters degree awarded by Brandeis as "an artist in philanthropy."





### Roger Crafts Named Dean of Students

Roger C. Crafts, dean of student life at the University of Rhode Island for seven years, has been appointed dean of student affairs. He assumed his new position this summer.

The appointment fills a new position, created as part of a reorganization that places greater authority in the top university officer responsible for student affairs. The dean reports directly to the president, giving him "a position in university governance equal to other deans, with the authority and flexibility appropriate for such an important area of responsibility," said President Handler.

The dean oversees all non-academic student activities, including athletics. Crafts, who holds a doctorate in higher education from Indiana University, went to URI as assistant dean of students in 1973. He previously was assistant to the dean of student affairs at Indiana University.

Crafts also holds a master's degree in college student personnel administration, and has written extensively on issues dealing with student life.

### New Trustees and Chair of Fellows Approved

Several new appointments to the Board of Trustees, and a change in the leadership of the Brandeis Fellows, were approved by the Board of Trustees.

Malcolm L. Sherman, former chairman of the Brandeis Fellows, was elected to the Board of Trustees, while Cleveland media executive and broadcaster Rena J. Blumberg '56 was named to succeed Sherman as chair of the Fellows. Also elected to the board this year were Louis Perlmutter '56, Steven Shulman and Charlotte Moses Fischman '64 as alumni term trustee. Faculty representatives are Denah H. Lida, professor of Spanish and Irving R. Epstein, professor of chemistry. Tracy B. Flack '86 and Yon Won Ho 'G are the student representatives.

Sherman is executive vice president of Zayre Corporation and president of Zayre Stores. He has served Brandeis as a member of the President's Council, as chair of the Board of Fellows, chair of the National Fellows Conference in 1980 and chair of the Board of Trustees Development Committee in 1983.

Blumberg, community relations director of radio stations WWWE/AM and WDOI/FM and host of a nightly television show, "Success" on the Cable News Network, was elected to a two-year term as chair of the Fellows. She served as an alumni trustee from 1978-1983. She is the author of *Headstrong — A Story of Conquests and Celebrations . . . Living Through Chemotherapy*.

Perlmutter, who holds a B.A. degree from Brandeis and a J.D. degree from the University of Michigan Law School, is a partner in the law firm of Lazard, Freres & Co. in New York City. He is a trustee of the American Jewish Congress and Phoenix House and the author of numerous articles in journals and periodicals. He has been profiled in "Fortune" and "Forbes" magazines.

Shulman is president and chief operating officer of the First City Capital Corporation, the New York-based merchant banking subsidiary of the First City Financial Corporation of Vancouver, British Columbia. Shulman, who is 43 years old, was vice president of the Signal Company, a large industrial company involved in aerospace and high technology. From 1971 until it merged with Signal in 1983, Shulman was a senior vice president at Wheelabrator-Frye Inc. He is also state chairman of the New Hampshire Anti-Defamation League.

Fischman, an attorney, is a partner in the New York law firm of Kramer, Levin, Nessen, Kamin & Frankel. She has been a Brandeis alumni class agent. A lecturer in law at Columbia University, she is a member of the executive committee and the Committee on Professional and Judicial Ethics of the New York City Bar Association and is a director of the Mexican-American Legal and Educational Defense Fund.

### Homecoming '84 Set For October

The Homecoming tradition continues the weekend of October 25-27. Of the many activities planned for both alumni and students, the varsity soccer game, with rival Babson College, should be an event no one will want to miss. For more information contact the Alumni Office.

### Dr. Judith Drachler Handel '67 Memorial Fund

The family and friends of Dr. Judith Drachler Handel '67 have established a fund in her memory. The fund, to be administered by the dean of the college, will help meet emergency needs of students, with preference being given to sociology majors. Dr. Handel, a distinguished alumna, was the wife of Dr. Warren Handel '67 and taught in the department of sociology, Washington University, St. Louis, Missouri.

### West Coast Director

Richard Sherman, a political scientist and marketing consultant, has been named to head a new Brandeis regional office in Beverly Hills, California.

Sherman, who holds a Ph.D. in political science from Brandeis, is responsible for the university's development efforts in Southern California, Arizona and Nevada. He is also forging closer ties with Brandeis alumni, Fellows and friends on the West Coast. He can be reached at 133 South Lasky Drive, Beverly Hills, California 90212.

### Alumni Role in Admissions Increases; Freshman Class Scores High in SAT's

The university this year will institute a major new effort to recruit additional students from foreign countries and increase the involvement of alumni in seeking top prospective students.

Evelyn S. Simha '52, a member of Brandeis' first graduating class and the first alumna to become a member of the university's faculty, will spearhead both efforts.

President Evelyn E. Handler named Simha this summer to the position of executive director of the Alumni Admissions Council. She has been serving as assistant to the president for university affairs.

Simha's new appointment comes on top of one of the best student recruitment efforts in recent years, according to David L. Gould, dean of admissions.

Some 3,400 applied for admission to Brandeis for the Class of 1988, an increase of close to 20 percent over last year. The percentage increase was among the highest of any of the major private universities in the country.

The quality of the students who compose this year's freshman class reflects the increased competition for admission to Brandeis, Gould says.

He notes that the overall Scholastic Aptitude Test (SAT) scores of the freshman class were 30 to 40 points above last year's.

Mathematics scores were the highest in the past five years and the combined math and verbal scores were the best since 1978.

The Merit Scholarship program begun last year was instrumental in attracting outstanding students to the campus, according to Gould. He says the program has attracted a number of high quality students who might have gone elsewhere were it not for the \$4,000 scholarships many were offered.

Merit scholarships are based exclusively on scholarly achievements, not on need. The funds for that program do not have an impact on the university's regular financial aid.

One of the most important factors in maintaining the high quality of student enrollment is the involvement of outstanding alumni in the admissions process. In Simha's new role, she will be responsible for strengthening and coordinating alumni admissions activities throughout the country and abroad and directing an expanded program in international student recruitment.

Foreign students — many of whom come to Brandeis through the Wien International Scholars program — currently represent more than 10 percent of the student body. International students have been an integral part of Brandeis since the university's earliest days.

### Lydian String Quartet Wins Naumburg Award

The Lydian String Quartet, artists-in-residence at Brandeis, has won one of two 1984 Naumburg Chamber Music Awards for performance excellence in competition at New York's CAMI Hall in the spring.

Hundreds of chamber music groups from around the country competed for the annual award, which is considered the nation's most prestigious honor for chamber music performance.

Although only one Naumburg award customarily is granted each year, the judges gave the 1984 prize to the Brandeis quartet and the Aspen (Colo.) Woodwind Quintet.

As Naumburg recipients, each group performed individual concerts at New York's Alice Tully Hall and received specially commissioned compositions by the composers of their choice, arranged and funded by the Walter W. Naumburg Foundation.

In addition, this year's winners will represent the United States in the music festivities at the 1984 Summer Olympics in Los Angeles.

Members of the Lydian String Quartet are Wilma Smith (violin), Judith Eissenberg (violin), Mary Ruth Ray (viola) and Rhonda Rider (violoncello).

They won the Naumburg award with a performance of chamber music by Beethoven, Mozart, Ravel and Brandeis composer Steven Mackey.

### New Director Appointed to Tauber Institute

Jchuda Reinharz, a distinguished scholar in contemporary Jewish Studies, has been appointed director of the Tauber Institute for the Study of European Jewry.

The institute is dedicated to the memory of the victims of Nazi persecution between 1933 and 1945. It was established as a gift to Brandeis by Laszlo N. Tauber, a Washington, D.C. physician, in honor of his parents.

The institute invites scholars to visit Brandeis to teach and conduct research in the history and culture of European Jewry between the World Wars. It also awards fellowships for post-doctoral research and arranges lectures, symposia and conferences. The research projects are published by the institute.

The institute currently is sponsoring a two-year series of lectures that explore Jewish reactions to anti-semitism. In the planning stage is a major symposium on the Jews of Poland.

Reinharz, the Richard Koret Professor of Modern Jewish History, is the author, editor and co-editor of eight books including *Fatherland or Promised Land: The Dilemma of the German Jew*. He co-edited *The Jew and the Modern World — a Documentary History* and the recently published *Israel in the Middle East*, both published by Oxford University Press.

He currently is working on a three-volume biography of Chaim Weizmann, president of the World Zionist Organization in the 1920s and 1930s and first president of the State of Israel. The first volume is due to be published early next year.



## Peace Studies Given Approval

A new minor concentration for undergraduates in peace studies has received the approval of the faculty and trustees and will be implemented in the spring of 1985.

The interdisciplinary program will focus on issues relating to nuclear war as seen through the perspective of the sciences and humanities. Students will be required to take courses in three areas: history of war and historical efforts to prevent war, analysis of human conflict, and scientific and technical understanding of weapons and their effect. Faculty teaching in the peace studies program will come from the departments of history, sociology, political science, biology, chemistry and the humanities.

In order to earn a minor in peace studies, students must complete five courses in the peace studies curriculum including a core course and a seminar research project. The core course, Introduction to Peace Studies, will be taught each year for one semester by two faculty members from different departments of the university, joined by other faculty who will teach in special areas of expertise. The course will explore major problems in peace studies and introduce students to the classical literature on the causes and preventions of war.

Seyom Brown, professor of politics and chairman of the peace studies program, along with David Hackett Fischer, Earl Warren Professor of History, have been raising funds needed for new faculty appointments, special colloquia and visiting speakers.

"The impetus for doing this concentration now is the shock, fear, and anxiety that students feel from the possibility that nuclear destruction could occur in their lifetimes," Brown says. "The program will deepen the student's understanding of the tremendous problem of war in society. The issues will go beyond the superficiality of public debate."

## History to Give New Accounting of Literature

Two Brandeis English professors have been selected for a prestigious task that will take them five years to complete and is expected to set directions for scholarship and teaching in the decades ahead.

Michael T. Gilmore and Philip Fisher are among 20 scholars who have been chosen to write "The Cambridge History of American Literature," a five-volume, 3,000-page literary history of America, under a special commission from Cambridge University Press.

The contributors were selected by Sacvan Bercovitch of Harvard University, president of the American Studies Association. Only four universities — Harvard, Pennsylvania, California-Berkeley and Brandeis — had two scholars from their faculties selected for the \$250,000 project.

"This has been an area of great strength at Brandeis," says Fisher, "going back to Philip Rahv, J. V. Cunningham and Irving Howe. Even Bercovitch's first job was at Brandeis."

"This history is meant to be a standard for our generation. The project is the first attempt to produce a history of American literature since the early 1950s," says Gilmore. Generally, a comprehensive study has been produced every 30 years, beginning with "The Cambridge University History of American Literature" in 1920 and continuing with Spiller's "Literary History of the United States" in 1948.

"Each generation should produce at least one literary history of the United States, for each generation must define the past in its own terms," said the opening paragraph of the Spiller volumes.

Each volume in the new work will discuss the poets, novelists and cultural history of these periods. "It will not be a summary, but a new accounting of American literature," says Fisher.

## Alumni Term Trustee Nominations

Nominations are sought for Alumni Term Trustee. The committee which reviews the nominations will meet in October to make its recommendations.

Alumni term trustees are elected each year to serve on the Board of Trustees for a five-year term. Nominees must have a record of outstanding contribution to Brandeis and to their own communities. Suggestions for nominees for the 1985 elections may be sent to Michael J. Sandel '75, Nominating Committee Chair, Alumni Office, prior to September 30, 1984.

## Library Acquires 4,600 Volume Shakespeare Collection

Through the Brandeis University National Women's Committee Library Benefaction Program, the Brandeis libraries have recently acquired more than 4,600 volumes of rare and valuable books by or about Shakespeare.

John H. Smith, professor of English, arranged shipment of one of the country's most extensive collections of 18th and 19th century Shakespeare editions and 19th century literature on Shakespeare. The collection belonged to Professor Smith's mentor from the University of Illinois, Professor T. W. Baldwin.

"He was an avid book collector, but he collected books primarily to serve his research needs," says Smith. "Therefore his collection is exactly the kind that a library like ours needs to assist the work of its faculty and students, both graduate and undergraduate."

Bessie Hahn, director of Library Services, agrees. "The Brandeis University Library has a strong Shakespeare collection already. But the Baldwin acquisition will greatly expand our existing collection, making it one of the more comprehensive ones in the Northeast," Hahn observed.

Scholars and Dignitaries  
Attend Dedication of  
the Volterra Center

Two Nobel laureates, the Italian ambassador to the U.S. and representatives of the U.S. State Department were among the dignitaries who gathered at Brandeis to dedicate a major new center to study the relationship between culture and science. The center is planning a series of conferences, public lectures and exhibits for the 1984-85 academic year.

The Vito Volterra Center — named for the late Italian mathematician, humanist and patriot — was dedicated at an all-day conference that focused on Volterra's place in the history of science and his contributions to Italian culture.

The center, located in Rapaport Treasure Hall, will encourage interdisciplinary activities within the university and cooperation among scholars all over the world.

The center includes the Vito Volterra Collection, which consists of 24,000 rare books, periodicals and manuscripts in the fields of mathematics, astronomy, physics and the history of science dating to the 16th century.

The collection was donated to Brandeis by Bern Dibner, a Brandeis Fellow and director of the Burndy Library in Norwalk, Conn. It is regarded as one of the most valuable collections in the fields of mathematics and the history of science.

Dibner, who spoke at the dedication ceremony, is a leading scholar in the history of science. He also gave the Brandeis library its Leonardo da Vinci Collection, which is considered one of the nation's most comprehensive collections of books on the great Renaissance figure.



*Dr. Bern Dibner and Italian Ambassador Rinaldo Petrignani attend the dedication of the Vito Volterra Center devoted to the study of the relationship between culture and science. A collection of 24,000 rare books and periodicals was donated to Brandeis by Dr. Dibner. The collection had belonged to the late Italian humanist and mathematician, Vito Volterra.*

The highlight of the dedication was a colloquium, "The Many Worlds of Vito Volterra," at the Sachar International Center. Speakers included Louis Nirenberg, Courant Institute of New York University; Paolo Galluzzi, Museum of the History of Science in Florence, Italy; Thomas Kuhn, MIT; Judith Goodstein, California Institute of Technology; and Arnaldo Momigliano, University of Chicago.

Also participating were Nobel laureates Paul Samuelson of MIT and Emilo Segre, U.C.-Berkeley, and Rinaldo Petrignani, Italian Ambassador to the U.S.

The Volterra Collection was purchased from the late scientist's heirs in 1980 by Dibner on the condition that it be organized into a center commemorating Vito Volterra. Dibner says he donated the collection to Brandeis because "as a research university founded by a people who throughout history have been persecuted by totalitarian regimes, culminating in the Nazi Holocaust, Brandeis seemed the most fitting repository for works that both honor Vito Volterra's brilliant scientific achievements and his courageous stand against totalitarianism in his own country."

Best known for his work in biometrics — the science of statistics applied to biological observations — Vito Volterra taught for many years in Italian universities. He subsequently became president of the Accademia Nazionale dei Lincei, a prestigious post held centuries earlier by Galileo. An outspoken foe of fascism under

Mussolini, he was expelled from the University of Rome and from leading scientific academies in Italy for refusing to sign an oath of allegiance to the government in 1931.

Volterra pursued his research in self-imposed exile, lecturing widely at major universities throughout Europe, and in 1936, Pope Pius XI nominated him to the Pontifical Academy of Science. Volterra died in 1940.

Alumni Needed for Networking

Are you an attorney? A physician? An entrepreneur? A musician? Whatever your vocation, please share your expertise with Brandeis students. The Hyatt Career Development Center, with the assistance of the Alumni Association, is expanding its network of professional contacts so students can learn about a particular profession before entering the job market. The network is *not* meant to serve as a job-placement service. Students will benefit by receiving information on career paths, learning requirements for entry into an occupation, and how alumni have developed their careers.

If you would like to be part of this important service to future alumni of Brandeis, please complete the form below, and an application blank for the Brandeis Resource Bank will be mailed to you.

Please return to:  
The Alumni Relations Office  
Brandeis University  
Waltham, Mass. 02254

Name	Class		
Address			
City	State	Zip	



## Sports Notes

Athletic success was contagious among many of the athletic teams during the 1983-84 season and the outlook is good that the winning trend will continue this academic year.

Many of the veterans from last year's men's national champion cross-country team will be returning and the basketball squad had its strongest recruiting season in recent memory.

A number of major events are scheduled for this fall for the cross-country team as it prepares to defend its title, including a dual meet against the University of Maryland and Harvard University at Franklin Park and the Notre Dame Invitational in South Bend, Indiana.

Another major fall event is the annual Brandeis/Babson soccer clash during Homecoming Weekend, October 27 at 1:30 p.m. at Marcus Field. Another feature of Homecoming Weekend, prior to the varsity game, will be a contest between Brandeis soccer alumni and Babson soccer alumni, tentatively scheduled for 11 a.m. on that same day.

After a successful recruiting effort, the Brandeis men's basketball season looks for an exciting and winning season for the Judges. Heading the list of incoming freshmen is 5'9" point guard Stanley House of Cambridge (Mass.) Rindge and Latin School. House guided his team to the finals of the Eastern Mass. Schoolboy Basketball Tournament and was named MVP of his league.

Also entering Brandeis in the fall are 6'6" forward Derek Oliver from Lowell, Mass., 6'4" guard/forward Rob Toomey of Johnstown, R.I. and 6'5" forward David Stern of West Orange, N.J.

Recapping the spring athletic season . . .

**The Men's Track Team** continued its dominance of New England Division III track & field, winning both the cross-country and indoor track & field team titles. The Judges became the first New England Division III team to win the "triple crown" of collegiate track by winning the outdoor track & field championship. In national competition, the Judges placed 8th out of a field of 208 teams at the NCAA Division III National Track & Field Championships where three Brandeis athletes were named All-America. Greg Steelman '87 (Pembroke, N.H.) won the individual championship in the discus and placed third in the shot put, Mark Beeman '86 (Chelmsford, Mass.) placed second in the 1500-meter event, and Misa Fossas '86 (Jamaica Plain, Mass.) placed third in the 10,000-meter run. Coach Norm Levine was named New England Division III Outdoor Track & Field Coach of the Year and was one of 25 coaches in the world named to *Runner's World* All-Star Coaching Team. He was also one of 10 coaches appointed to NIKE's Advisory Board of Coaches. The group provides clinics for runners.



**LAUREN ANDREWS '86** (Hull, Mass.) lifts 300 lbs. at the Massachusetts State Power Lifting Competition. Andrews, a relative newcomer to the sport of power lifting, easily won the state competition with lifts of 210 lbs. in the bench press, 385 lbs. in the squat lift and 445

lbs. in the dead lift. During a third world record attempt, Andrews hoisted 460 lbs. in the dead lift to establish a new world record. However, the old record of 457 lbs. will remain intact, since there was no drug testing available at the competition.

**The Men's Tennis Team** concluded the season with a record of 12 wins and 2 losses and captured its third consecutive New England College Division Championship. Bobby Bernstein '86 (Newton, Mass.) won the New England number one singles championship and was selected to participate in the NCAA Division III National Tennis Championship. During the season, Bernstein had an 11-3 mark in singles competition and a 10-4 record in doubles play. Seven members of the team were selected All-New England.

**The Men's Baseball Team** ended the 1984 season with a record of 22-9-1 and was selected to compete at the NCAA Division III Northeast Regional Tournament. Captain Dwayne Follette '84 (Plymouth, Mass.) rewrote many of the Judges' records this past season . . . including most doubles in a season (12), most doubles in a career (27), most games played (126), most put outs in a career (743) and most hits in a season (52). Follette was selected to the Division III Northeast All-District team and played in the New England Coaches All-Star game at Fenway Park. Meanwhile, teammates Angel Bonilla '85 (New York, N.Y.) and Ross Nadeau '87 (Newburyport, Mass.) were named to the All-District second team and coach Pete Varney was named co-coach of the Year in New England Division III. Varney also helped coach the college division team at the New England Coaches All-Star game.

Lauren Andrews '86 (Hull, Mass.) was the star of the **Women's Outdoor Track Team**. Andrews was awarded All-American honors at the NCAA Division III National Track & Field Competition where she established a new NCAA record in the shot put with a throw of 49 feet, 0 inches, bettering the previous mark of 48 feet, 10½ inches. In addition, she established new ECAC records in both the shot put and the discus with respective throws of 45 feet, 10 inches and 146 feet, 10 inches. In dual competition the women defeated Clark University and Worcester Polytechnic Institute for a 2-0 dual meet record. Other outstanding performances were turned in by Christine Brace '87 (Red Bank, N.J.) in the heptathlon, Charity Quinn '84 (Easton, Penn.) in the sprints, Carol Deedy '86 (Southwick, Mass.) in the distance events and by Sharon Harris '85 (Ridgewood, Conn.) in the javelin.

The **Co-Ed Sailing Team** continues to gain experience and success after only a few years of varsity competition. This past spring, the team competed in seven regattas with a third place finish at the Gibb Trophy at Tufts and a second place finish at the New England Dinghy Tournament highlighting the season.

The **Women's Softball Team** had their best season ever. The Judges had a record of 14-3 and were selected to compete in their first post season tournament. Unfortunately the women dropped a 2-1 decision to Regis College in the first round of the Massachusetts State Tournament. Claudia Jaul '84 (Scarsdale, N.Y.) was the team's leading hitter with a .456 average, while Julie Stern '86 (New Rochelle, N.Y.) was the ace of the pitching staff posting a record of 11-2.

### New Coach Brings Winning Spirit to Women's Basketball



After only three seasons, Donna Devlin's impact on Brandeis' women's basketball program has been dramatic. A team that only a short time ago had inexperienced players with limited skills captured the Massachusetts State Class "C" Championship after concluding a successful 15-7 season. This past year marked the Judges' third consecutive appearance in the post-season tournament.

Quite a change in a short time. Only three years ago, Devlin recalls, "We had 11 players on the team, but only once did all 11 show up for practice. We had players that had never played before and players with limited skills."

It was a tough first year, but Devlin likes challenges. "My first season at Brandeis was my most challenging coaching experience ever," she remembers. But then, those who knew Devlin expected success.

Devlin has a professional national reputation. President of the Women's Basketball Coaches Association, former chairperson of the Eastern Collegiate Athletic Conference Women's Basketball and head coach of the National Sports Festival East Team, Devlin came to Brandeis with solid credentials.

In 1980, Devlin coached the Worcester State College women's basketball team to the Division III National Championship and was named Division III National Coach of the Year. Two seasons later, Devlin left Worcester State and took over the struggling basketball program at Brandeis.

Many of her fellow coaches couldn't understand why she would make that move just after her team had achieved success. Why not rest on her laurels? But Devlin responds to different instincts. "I left Worcester State because I had taken the program as far as it could go . . . We reached our limit by winning the national title. Also, I was getting into a rut there, teaching the same courses, year in and year out. It was time for a change, and Brandeis offered me new challenges and opportunities."

The change has made a major difference in the basketball program at Brandeis where she was recently named associate director of women's athletics and chair of the department of physical education.

Turning the team around required instilling new enthusiasm and drive to the players. "At Brandeis, winning was a new feeling for the players," she says. In her first year of coaching here it was difficult to assemble the whole team for practice, but "by the second year, it was a rarity when all players were not at practice."

During the three years that Devlin has been at Brandeis, there has also been a change in the type of student-athletes enrolling in the athletics programs. "When I first came here, the women viewed athletics in the same light as any other club or activity on campus. Now, we are getting an athlete that is as committed to athletics as she is to academic requirements."

She adds, "We try to convince students interested in athletics that they are capable of excelling in the classroom while playing an intercollegiate sport."

Devlin's coaching success comes as no surprise since she was an exceptional and versatile college athlete.

Earning her undergraduate and graduate degrees from Southern Connecticut State University, Devlin was a member of the varsity basketball, volleyball and badminton teams there.

She was also an outstanding pitcher/infielder for the Raybestos softball team, an amateur club that travelled during the spring and summer months, playing other clubs from Connecticut to Florida.

During the off-season, when all of the coaching and recruiting has been completed, Devlin, a 8-handicapped golfer, enjoys touring with her husband Bob (director of athletics at Worcester State College) testing out local and regional golf courses.

After 15 years in the collegiate coaching ranks, Devlin has accumulated an overall record of 232-65, which ranks her 19th among active collegiate coaches in the country and second among active Division III women's basketball coaches. ■



# Faculty Notes

**Albert S. Axelrad**  
chaplain and Hillel director, delivered a lecture at Lewis and Clark College on "The Nuclear Issue: A Religious Approach." He was scholar-in-residence at the retreat of Portland's Havurah Shalom.

**Kathleen Barry**  
assistant professor of sociology, spoke at William Smith College on "Interpersonal Violence" and at the University of Massachusetts on "Pornography as an Ideology of Cultural Sadism." She also published "International Feminism: Networking Against Female Sexual Slavery," a report from a global meeting on the subject held last year in Rotterdam.

**Ross Bauer**  
assistant professor of music, was the first recipient of the Walter Hinrichsen Award of the American Academy and Institute of Arts and Letters. His "Tonarten" for solo piano, most recently performed at a concert at Northeastern University, will be published by C. F. Peters. He was also a finalist in the St. Paul Chamber Orchestra Composers Competition.

**Gerald S. Bernstein**  
associate professor of fine arts, delivered lectures at the Henry Plant Museum of the University of Tampa and at Southeastern University. He participated in a symposium on architecture at the Gardner Museum in Boston and presented a lecture series on "Colonial and Victorian Boston" at the Boston Architectural Center.

**Ludovico Borgo**  
Robert B. Mayer Memorial Professor of Fine Arts, delivered a paper on "Fra Bartolomeo and Raphael: The Roman Encounter of 1513" at the International Congress of Raphael's Studies in Italy.

**Martin Boykan**  
professor of music, was awarded a Guggenheim Fellowship for 1984-85.

**Seyom Brown**  
professor of politics, addressed the English Speaking Union on "An American View of Canadian Foreign Policy" and had his book, *On the Front Burner: Issues in U.S. Foreign Policy* published by Little, Brown.

**Steven L. Burg**  
assistant professor of politics, has been awarded a research fellowship by the Russian Research Center of Harvard University for full-time research and writing during 1984-85 on a project examining the impact of multinationality on Soviet political development. He presently holds a Sheva and Marver Bernstein Junior Faculty Research Fellowship at Brandeis.

**Peter Conrad**  
assistant professor of sociology, delivered a series of lectures at the University of Florida, Boston University School of Public Health, and the New York State Epilepsy Society.

**George L. Cowgill**  
professor of anthropology, was a discussant for a symposium on the concept of diversity in archaeology at the annual meeting of the Society for American Archaeology. He presented "On Estimating Prehistoric Population Trends" at the annual conference of the Northeastern Anthropological Association and at MIT on "Narrowing the Gap Between Archaeological Remains and Sociocultural Interpretation."

**Stanley Deser**  
Enid and Nathan S. Ancell Professor of Physics, delivered a paper at the Brandeis physics colloquium and conducted theoretical physics seminars at Brown and Syracuse universities. He is a member of the

organizing committee of the Niels Bohr Centennial of the American Academy of Arts and Sciences. His recent research paper was published in "Classical and Quantum Gravity."

**Edward Engelberg**  
professor of comparative literature, had his reviews of studies on W. B. Yeats appear in *English Literature in Transition, 1880-1920* and in *Yeats Studies*.

**Robert Evans, Jr.**  
Atran Professor of Labor Economics, had his article, "To Work or not to Work," published in *The Quarterly of Social Security Research* (in Japanese).

**Gerald D. Fasman**  
Louis and Bessie Rosenfield Professor of Biochemistry, was a visiting lecturer at the Cardiovascular Research Institute, School of Medicine, at the University of California. He also lectured at Genentech, Inc., in San Francisco.

**Gordon Fellman**  
associate professor of sociology, is a member of a group that organized the Boston Nuclear Study Group. Its members are writing a book on nuclear weapons policy, its social, economic and psychological costs, and non-military alternatives for handling international conflicts.

**Randall K. Filer**  
assistant professor of economics, has been awarded a two-year grant from the National Science Foundation to investigate the influences of individual personalities and tastes on the occupational structure and mobility of the U.S. economy.

**Lawrence H. Fuchs**  
Meyer and Walter Jaffe Professor of American Civilization and Politics, gave several invited lectures in the spring including a talk at New York University under the auspices of the Humanities Council; the Lowell House lecture at Harvard University; an all college lecture at Hamilton College; and seven lectures on "U.S. Immigration Policy" in Mexico under the auspices of the U.S. Information Service. His chapter on "Ethnicity and Foreign Policy" appeared in a new volume, *Ethnicity and War*, while his book, *Hawaii Pono*, was reissued in an updated revised edition by Harcourt, Brace.

**Bessie K. Hahn**  
director of library services, published "Automation and Resource Sharing in Serials at the Boston Library Consortium" in *Proceedings of the First Asian Pacific Conference on Library Science*.

**James B. Hendrickson**  
professor of chemistry, was plenary lecturer at the Annual Congress of the Royal Society of Chemistry in England. He also lectured to the chemical industry in Sandoz, Vienna, Basel, Hoechst and Frankfurt.

**Ray Jackendoff**  
professor of linguistics, co-authored "An Overview of Hierarchical Structure in Music" in *Music Perception*. He spoke on "Awareness and Understanding" at the University of California at Berkeley and at the Center for Advanced Study in Behavioral Sciences. He gave talks at the Stanford Linguistics Department; at the University of California at Irvine; at a seminar at the Eastman School of Music. He also lectured at the University of Rochester and at the Stanford University Conference on Metrics.

**William P. Jencks**  
Gyula and Katica Tauber  
Professor of Biochemistry  
and Molecular  
Pharmacodynamics,  
lectured at the California  
Institute of Technology,  
the University of British  
Columbia, Simon Fraser  
University, and the  
University of Alberta on  
"How does ATP make  
work?" and "How does a  
reaction choose its  
mechanism: Substitution  
reactions of 1-phenylethyl  
derivatives."

**William A. Johnson**  
Albert V. Daniels  
Professor of Philosophy  
and Christian Thought,  
was recipient of the  
following grants: a Tauber  
Foundation grant to study  
the Christian Gospels and  
the Origins of Anti-  
Semitism; an American  
Scandinavian Foundation  
grant to study Swedish  
Immigration and the  
Establishment of Swedish  
Churches in New York  
City, and a grant from the  
Arthur Vining Davis  
Foundation to propose a  
model for theological  
education.

**Theodore Kazanoff**  
professor of theater arts,  
was named the first  
Blanche, Barbara and Irving  
Laurie Professor of Theater  
Arts at Brandeis.

**Karen Klein**  
associate professor of  
English, had a one-woman  
show of drawings at the  
Wayland Town Building  
this spring.

**Kenneth Kustin**  
professor of chemistry,  
lectured on "Vanadium: A  
Versatile Biochemical  
Probe with an Elusive  
Biological Function" at  
Brandeis, Columbia  
University and  
Swarthmore College. He  
also spoke on "Design of  
Oscillating Reactions" to  
the department of  
chemistry at SUNY Stony  
Brook.

**Norman E. Levine**  
associate professor of  
physical education, spoke  
at the New York State  
Coaches Clinic on  
"Cross-Country  
Training." He was selected  
by *Runner's World*  
*Magazine* to its All-Star  
World Coaching Team and  
also selected to coach the  
collegiate (NCAA)  
distance team in Australia  
this summer.

**Denah Lida**  
professor of Spanish, spoke  
at Wheaton College on  
Rosalia da Castro, Spanish  
poet and novelist, and at  
the MLA meetings on  
secularization of religions  
in a novel by Perez Galdo.

**Blanche Linden-Ward**  
lecturer with the rank of  
assistant professor of  
American Studies, served  
as a panelist at the  
conference on "New  
England Entering the 21st  
Century: Planning for a  
Sustainable Future" at the  
Lincoln Institute for Land  
Policy. She also  
commented on a session  
held by the New England  
American Studies  
Association.

**Robert J. Maeda**  
professor of fine arts,  
presented a paper "The  
Architectural Motif in  
Post-Song Painting" at the  
International Symposium  
on Chinese Traditional  
Architecture at the China  
Institute of America.

**Joan Maling**  
associate professor of  
linguistics, spoke on  
"Unaccusative, Passive  
and Lexical Case" at the  
West Coast Conference on  
Formal Linguistics and on  
"Nonnominative Subjects  
in Icelandic" at the  
Symposium on  
Grammatical Relations at  
SUNY-Buffalo. She also  
participated in the  
workshop in Scandinavian  
Syntax in Norway.

**Leslie Zebrowitz**  
McArthur  
professor of psychology,  
gave an invited address at  
the annual meeting of the  
Eastern Psychological  
Association on  
"Perception Affords  
Conception." She also  
co-authored "Toward An  
Ecological Theory of Social  
Perception" which  
appeared in *Psychological*  
*Review*.

**Danielle Marx-Scouras**  
assistant professor of  
romance and comparative  
literature, lectured at  
Harvard University and  
gave a paper at the Twelfth  
Annual Twentieth  
Century Conference at the  
University of Louisville on  
"Elio Vittorini and  
Cultural Renewal in  
Post-War Italy." She also  
presented a paper on  
"Decolonization as  
Deconstruction: Applying  
Post-Structuralist Theory  
to Contemporary  
Maghrebian Fiction" at the  
Tenth Annual African  
Literature Association  
conference. Her article on  
Elio Vittorini was  
published in the  
*Association of Teachers of*  
*Italian Journal*.

**Teresa Mendez-Faith**  
assistant professor of  
Spanish, delivered a paper  
on the dramatic works of  
Griselda Gambaro at a  
conference on Latin  
American Literature and  
another on "Aracataca  
Re-Visited: Genesis and  
Meaning of Macondo" at  
the International  
Symposium on Gabriel  
Garcia Marquez. She also  
had four articles published  
in journals of South  
American literature  
including an essay on  
Borges and Bertolucci in  
*Revista Plural*.

**Simin Meydani**  
senior research associate,  
Foster Biomedical  
Research Laboratory,  
received an NIH New  
Investigator Research  
Award for a three-year  
study entitled "Aging,  
Nutrition, and the  
Immune Response."

**Ruth S. Morgenthau**  
Adlai E. Stevenson  
Professor of International  
Politics, chaired a panel at  
the annual meeting of the  
African Studies  
Association where she also  
presented a paper. In the  
spring she presented a  
paper in a series organized  
by the Council on African  
Studies of Yale University.

**Alfred Nisonoff**  
professor of biology and  
Rosenstiel Basic Medical  
Sciences Research Center,  
presented a paper on the  
use of the antiidiotypic  
antibodies as vaccines at a  
symposium on "New  
Horizons in Microbiology"  
in Rome.

**Kevin O'Brien**  
instructor in physical  
education, was a lecturer at  
the University of Arizona  
Wildcat baseball camp.

**Hillard Pouncy**  
assistant professor of  
African and  
Afro-American studies,  
spoke on "Symbolic  
Politics in a Colonial State:  
The Case of British West  
Africa, 1820-1945" at  
Michigan State  
University's conference on  
New Themes in African  
Colonial History. He also  
delivered a lecture at the  
Dubois Institute, Harvard  
University and conducted  
archival research in  
Nigeria, Gambia and Sierra  
Leone under a grant from  
the Mazer and Sachar  
Funds.

**Benjamin C. I. Ravid**  
Jennie and Mayer  
Weisman Associate  
Professor of Jewish  
History, published two  
articles, "Money, Love and  
Power Politics in Sixteenth  
Century Venice" in  
*Proceedings of the First*  
*Italia Judaica Conference*,  
and "Antisemitism in  
Seventeenth Century  
Italy" in the *Association*  
*for Jewish Studies Review*.  
He also presented "The  
Venetian State Archives as  
a Source for Jewish  
History" at the annual  
conference of the  
Association for Jewish  
Studies.



Paula Rayman assistant professor of sociology, was invited by the Board of Directors of the National Health Association to be on the U.S. National Commission to study the impact of unemployment on mental health. Her article "Collective Organization and the National State: The Kibbutz Model" was published in *Critical Studies in Organization and Bureaucracy* by Temple University Press.

Shulamit Reinharz assistant professor of sociology, gave the keynote address, "Older Women: Feminist Perspectives," at a conference funded by the National Institute on Aging. Her book, *On Becoming a Social Scientist: From Survey Research to Participant Observation and Experiential Analysis*, was re-issued in paperback by Transaction Books with a new introduction. Another book, *Psychology and Community Change*, co-authored with four psychologists, was published by Dorsey Press. In the summer she and Peter Conrad of the sociology department published a special issue of the journal *Qualitative Sociology* in which they wrote the introductory essay.

George Ross professor of sociology, received a Fulbright Senior Research Fellowship for a study of the politics of a new middle strata in France and Britain. His book *Unions and Economic Crisis: The UK, West Germany and Sweden* was published in London by George Allen and Unwin. His articles on contemporary French communism were published in the *Quaderni*

and in *New Political Science*; on French economic policy appeared in *Studies in Political Economy* and in *The New Republic*; and on French trade unionism in *The French Working Class, Economic Crisis and Political Change*.

Robert A. Schneider assistant professor of history, delivered a paper on "Penitential Processions in 16th and 17th century France" at the Conference of the Language of Gesture in the Renaissance. He was also a commentator at a session of the annual meeting of the Society for French Historical Studies.

Silvan S. Schweber professor of physics and Richard Koret Professor in the History of Ideas, gave invited lectures to the departments of physics and history of science at UCLA, at Stanford University and the Office for History and Technology at the University of California at Berkeley. He also delivered a talk on "The relation between Probability and Reductionism in Physics and Biology during the 19th Century," at the University of Arizona.

Leigh Sneddon assistant professor of physics, received a grant from the Air Force Office of Scientific Research and published two articles in *Physical Review* and another in *Physical Review Letters*.

Bennett I. Solomon lecturer in Jewish education, had his article "Theory into Practice" published in *The Pedagogic Reporter*. He also presented a paper on "The Development, Introduction and Implementation of Curriculum in Jewish Education Today" at the Second International Research Conference sponsored by Hebrew University.

Maurice R. Stein

Jacob S. Potofsky Professor of Sociology, was elected to the council of the community section of the American Sociological Association and appointed chair of its committee on research.

James A. Storer assistant professor of computer science, spoke on "Textual Substitution Techniques for Data Compression" at a NATO sponsored conference in Italy, and presented a paper, "Uniform Circuit Placement," at the International Workshop on Parallel Computing, also in Italy.

Bernard Wasserstein professor of history, was invited to be a member of the Institute of Advanced Study, Hebrew University of Jerusalem for the 1984-5 academic year. He also was awarded a research grant by the American Council of Learned Societies.

Jeffrey Williams assistant professor of economics, co-authored "The Welfare Effect of the Introduction of Storage" published in the *Quarterly Journal of Economics*.

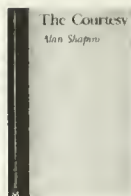
Kurt H. Wolff professor of social relations, emeritus, contributed to a symposium on religion and politics published in *Telos*, and had an article "Karl Mannheim: An Intellectual Itinerary" published in *Society*.

Jonathan Woocher assistant professor of Jewish communal service, served as academic coordinator of the First World Jewish Young Leadership Assembly in

Israel. His report on "The Conference of Jewish Communal Service: A Professional Profile," was presented at the group's annual meeting. He also co-edited *Perspectives in Jewish Population Research* published by Westview Press and the Center for Modern Jewish Studies.

Harry Zohn professor of German, was elected to the Academy of Independent Scholars. He lectured at Bentley College and Kentucky and Colorado universities. He published articles on "Trakl, Kraus, and the Brenner Circle" in *Jahrbuch fuer Internationale Germanistik*; and "Music in Ferdinand Raimund's Plays" in *Modern Austrian Literature*. He also published an article on winegarden songs in Vienna in *New American Review*.

Irving Kenneth Zola professor of sociology, was keynote speaker at an interactive workshop on the quality of life of disabled persons sponsored by the Ohio Humanities Council; plenary session chair at Heller School's conference "Toward Social and Economic Justice;" speaker at Salve Regina, the Newport College. He also spoke at Framingham State College, the Cabot Society of Harvard Medical School and Boston University, and was a discussant and panelist at the Western Social Science Association meeting. His foreword "Communication Barriers Between the 'Able-Bodied' and the 'Handicapped'" appeared in the 2nd edition of *Psychological and Social Impact of Physical Disability*.



## Faculty

*Israel in the Middle East*  
Edited by **Itamar Rabinovich** and **Jehuda Reinharz**, Richard Koret Professor of Modern Jewish History and Director of the Tauber Institute  
Oxford University Press

This timely anthology offers ready access to the most significant documents on the domestic and foreign policy of the modern state of Israel. The book contains a wealth of primary source material, much of it previously unavailable in the United States and Europe, including memoirs, biographies, diaries, legal texts, Israeli press reports, and Arabic documents.

*Simon Rawidowicz: My Conversations with Bialik*  
Edited by **Benjamin C. I. Ravid**, Jennie and Mayer Weisman Associate Professor of Jewish History and Yehuda Friedlander Dvir Press

The book contains conversations in Berlin in the 1920s between the Hebrew poet Haim Nahman Bialik and Simon Rawidowicz, who became the first chairman of the Near Eastern and Judaic Studies at Brandeis. The conversations were recorded by Rawidowicz who adds his illustrative comments. The book has special significance because it sheds new light on a relatively unknown period in Bialik's life. In Yiddish.

*Mother Death: The Journal of Jules Michelet, 1815-1850*  
Translated and edited by **Edward K. Kaplan**, associate professor of French  
The University of Massachusetts Press

*Mother Death* gives an intimate view of Michelet through selections from his private journal that form a coherent life story. The text provides insights into Michelet's mind and reveals the evolution of his thinking on what it means to write history, on the rhythms of decay and regeneration, and on the connection between life and social progress. An accompanying commentary by the translator describes significant events in Michelet's life.

*Socio-Medical Inquiries: Recollections, Reflections, and Reconsiderations*  
**Irving Kenneth Zola**, professor of sociology  
Temple University Press

Using personal experiences and observations in a series of essays, Zola discusses the nature of social research and examines the medicalization of society and the place of health care in society. The author examines the areas where medicine, culture and society intersect and how different ethnic groups approach medical care.

*Colonialism In Sri Lanka*  
**Asoka Bandarage**, assistant professor of sociology  
Mouton

The book is a detailed historical study of the impact of the plantation economy and the British colonial state on the political economy, class structure and caste and ethnic configurations of Sri Lanka. It also reevaluates and refines existing theories on Third World development.

*Cyclophanes*  
**Philip M. Keehn**, associate professor of chemistry  
Academic Press

This two-volume work is an extensive overview of the history, current state of research, and potential developments in the field of cyclophane chemistry.

## Alumni/ae

*The Courtesy*  
**Alan Shapiro '74**  
University of Chicago Press

Alan Shapiro's first full collection of poems frequently reflects "the scenes of a Jewish childhood." The author recreates memories of his formative years through character portraits. Written primarily in free verse, Shapiro's poetry has appeared in several national publications.

*The Wild Ass of the Ozarks: Jeff Davis and the Social Bases of Southern Politics*  
**Raymond Arsenault**  
GR '81  
Temple University Press

The book follows the political saga of Jeff Davis, a southern demagogue whose career influenced generations of southern politicians. Arsenault follows the life of the man who dominated southern politics for nearly three quarters of a century, as attorney general and later governor of Arkansas. The book provides an in-depth understanding of the demography of southern politics, especially during the Reconstruction era when racial issues and voting patterns developed and set the pattern for southern politics.

## Legacy for the Future

This new, informative booklet discusses the importance of having a will, offers timely estate planning tips, and reports on the growing impact of bequest income which, over the past five years, has accounted for 23 percent of all giving to Brandeis.

A free copy of this publication is yours for the asking. Write or call Joseph E. Cofield, director of planned giving, Brandeis University, Waltham, Massachusetts 02254, 617-647-2359.





# Class Notes

'52

Dr. Caroline Shaffer Westerhof, former advisory consultant to the Presidential Task Force on Regulatory Relief, was appointed visiting professor of leadership and management at the Air War College of the United States Air Force.

'53

Joan Hamerman Robbins published her first book, *Women Changing Therapy: new assessments, values and strategies in feminist therapy*.

'54

Carl Gurgold, co-owner of the North American Film Corporation, announced the opening of his new plant in South Carolina.

A particularly notable announcement was made recently by Bernice Berman Rose and Herbert Wolk. Bernice's son, Mitchell Rose '83, has become engaged to Herbert's daughter, Carol Wolk '83—a second generation alumni engagement!

'55

Gloria Goldreich, whose novel *Leah's Journey* won the National Jewish Book Award in 1979, has since published *The Promised Land* and *This Burning Harvest*. She is currently at work on a new novel.

Nancy Greenblatt was appointed executive director of the National Organizations Advisory Council for Children.

Avis Horwitz Lampert made two appearances on the national T.V. program "Woman to Woman," a show originating in California and seen in over 200 cities. Avis was part of a panel discussing children with special needs, and served on another panel dealing with women re-entering the job market.

Arizona Governor Bruce Babbitt announced the appointment of Star Miller Sacks to the Arizona Commission on the Arts. Star, a leading lecturer in the field of crafts, is co-founder and co-owner of The Hand and Spirit Crafts gallery in Scottsdale, Arizona.

'56

Harvey S. Kupferman has been made a partner in Lord, Abbet & Company, one of the nation's oldest and largest investment management firms.

'57

Evelyn Fox Keller, visiting professor of science, technology and society at MIT, gave a colloquium and lecture on "Gender and Science" as part of a new Williams-Bennington Women's Studies Speakers Series last October.

'58

Barbara Levitov Cohen, owner of the New York Bound Bookshop in New York City, has published two books—*New York the Wonder City 1932* and *Recollections of an Old Cartman*. Last year she published *Letters to Phil—Memories of a New York Boyhood, 1848-1856*.

'59

Composer and musician Simon Sargon is living in Texas where he is the director of the Southern Methodist University Opera Theatre and the music director of Temple Emanu-El in Dallas.

'61

Dr. Elaine F. Greene, a clinical psychologist in private practice in Rochester, New York, presented a paper on "Improving the Quality of Life of Battered Women And Their Families" at the Third World Congress on Organizational Development held in

Dubrovnik, Yugoslavia. Dr. Greene is on the Board of Directors of Alternatives for Battered Women, Inc., a shelter and telephone counseling service for victims of domestic violence, located in Rochester.

Deanne Stone, executive director of the Maimonides School in Brookline, Mass., was installed as the new national chairwoman of the Council of Jewish Federations at the General Assembly in Atlanta.

Arthur Wilner received an M.B.A. from Suffolk University while employed full time as the first assistant clerk-magistrate of the District Court of Brockton.

'62

Congressman Stephen J. Solarz's "op-ed" piece on strategic interests and human rights was featured in the *New York Times* last October.

'63

Meadowbrook Press has published *The Traveler's Guide to European Customs and Manners*, co-authored by Nancy Lichman Graganti.

Ronald L. Kaiserman has been appointed to the Philadelphia Industrial Development Corporation, a non-profit partnership organization which was formed by the City of Philadelphia and the Greater Philadelphia Chamber of Commerce to finance programs to aid existing businesses and to attract new ones to the city.

Marshall D. Stein was author of an article on the Massachusetts bail statute which concludes that its preventive detention provisions are unconstitutional. It was published in the June 1983 *Massachusetts Law Review*.

'64

Jeffrey Poster has announced the formation of his partnership with Andrew Sargent under the firm name of Poster and Sargent, Attorneys at Law. The practice is based in Los Angeles.

'65

The law firm of Frandzel & Share announced the appointment of Geraldine Mund to the United States Bankruptcy Court, Central District of California.

'66

Lois Galgay Reckitt was named vice president of the National Organization for Women.

'67

Judith Justman, assistant chief of City Hospital (Worcester) residency program in emergency medicine, has been appointed acting chief of the hospital's division of emergency medical services. Judith received her MD from New York Downstate Medical Center in Brooklyn.

'68

Jonathan Brant, former assistant attorney general, Massachusetts Department of the Attorney General, has become counsel to Widett, Slater & Goldman, P.C., of Boston and Hartford. Jonathan is concentrating his practice in the field of health care law.



Vincent Ficcaglia was elected second vice president of the Corporate Research Department at New England Mutual Life Insurance Company.

'69

Neil B. Kauffman and his wife, Barbara Drebing, have formed the firm of Kauffman & Drebing, Financial Advisors. Based in Philadelphia, the firm offers personal financial planning, financial planning seminars to corporate employees, and pension performance evaluation.

Walter S. Mossberg was named deputy Washington bureau chief for the *Wall Street Journal*. Walter was a reporter in the *Journal's* Washington bureau for 10 years, serving most recently as the paper's Pentagon correspondent. He lives in Washington with his wife Edith Marcus Mossberg and their two children, Steven, age five and Jonathan, age one.

Stanley R. Scharf recently received a Ph.D. in molecular biology from the University of California, Berkeley. He is a post-doctoral fellow in the botany department there.

The Association of Reform Zionists of America has named Rabbi Eric H. Yoffie national executive director. He formerly served as director of the Midwest Council of the Union of American Hebrew Congregations.

'70

Bill Lebovich is the author of the recently published *America's City Halls* which will accompany an exhibition of the same name traveling nationwide under the auspices of the Smithsonian Institution. Lebovich conceived and directed this project which provides histories and photographs on 114 city halls.

Arthur Levine, president of Bradford College in Bradford, Massachusetts, spent a week as a high school student in Lawrence, Mass. His "study session," featured in a *Boston Globe* article, allowed him to experience today's high schools firsthand, and was the first step in Levine's effort to bridge the gap between high schools and colleges in the Bradford vicinity.

Temple, Barker & Sloane, a management and economic consulting firm in Lexington, Mass., announced the election of Christopher Meyer as a principal of the firm.

Dr. Marsha Weinraub was mentioned in a *New York Times* article on child development. Her research on sex-roles revealed that most children are aware of sex differences and sex-role-appropriate behavior by the age of three.

'71

Governor Michael S. Dukakis (Mass.) has nominated Barbara A. Dortch to be a judge in the Boston Municipal Court. Barbara is associate general counsel to the MBTA and assistant corporate counsel to the city of Boston.

Roy J. Watson, Jr. received his master's degree in public administration from the Kennedy School of Government at Harvard University. A graduate of Boston College School of Law (1975), Mr. Watson is the author of a monthly column on immigration law and is developing a series of overseas lectures on immigration and international business.

Stuart Weisberg was appointed staff director and chief counsel of the House Government Operations Subcommittee on Manpower and Housing.

'72

Rosalie W. Gerut received an M.A. in psychology from Tufts University in May 1984. In addition to her studies, she has been pursuing a music career. She recently wrote and recorded the soundtrack for the film "Breaking the Silence" which was aired in April 1984 on PBS.

Elliot S. Maggin has announced that he will be a democratic candidate for the U.S. House of Representatives in the Second Congressional District (New Hampshire).

Warren Soiffer is in Tokyo, Japan where he is serving as an assistant cultural affairs officer for the United States Information Agency.

E. P. Dutton recently published two children's books by Jane E. Sutton: *Confessions of an Orange Octopus* and *Not Even Mrs. Mazursky*. Another book, *Me and the Weirdos*, was published in paperback by Bantam Books.

'73

After receiving a Ph.D. from Boston University in Art History in 1981, Francine Koslow spent two years as a professor of art history at McGill University. She is currently a lecturer at Pine Manor College, as well as an art consultant and tour guide. She also served as a guest curator at the DeCordova Museum in Lincoln, Mass. for their summer 1984 exhibition "Henry David Thoreau as a Source of Artistic Inspiration."

Beverly Weintraub Magidson has become the first woman to be appointed a conservative rabbi. Rabbi Magidson studied at Hebrew Union College and presides over the Beth Shalom synagogue in Clifton Park, New York.

'74

Senior resident in pediatrics at Buffalo Children's Hospital, Joel M. Fiedler has begun a fellowship in allergy, immunology and rheumatology at St. Christopher's Children's Hospital in Philadelphia.

Joette Katz, an assistant public defender in Bridgeport, Conn. Superior Court, was appointed Chief of Legal Services for the State Public Defender's Office.

Alan Klein, MD is currently practicing pediatrics and living in La Jolla, California. After a sabbatical tour to the South Pacific and Asia, he will be joining the Department of Anesthesiology of the Harvard Medical School at the Brigham and Women's Hospital.

Alan Shapiro's first full collection of poems, *The Courtesy*, has been published by the University of Chicago Press. Alan is also the author of *After the Digging*, and his poems have appeared in such publications as *Canto*, *The Southern Review* and *The New Republic*.

'75

E. F. Hutton & Co., Inc. appointed Howard M. Canan account executive in their Worcester office.

Joshua A. Copel is living in Connecticut where he is a fellow in Perinatology at the Yale University School of Medicine.

Debbie Dunn, an associate producer with ABC News, is on the campaign trail covering the 1984 election with ABC's political broadcast unit. She's hoping to see many old Brandeis friends during her travels and would like to hear from anyone with advice about living in New York City.



Michael Steven Greene was appointed to the Florida Land Sales Advisory Council in February. Michael is an attorney specializing in real estate, banking and business law. He recently received a Distinguished Service Award from The Public Interest Law Bank of the Dade County Bar Association.

Michael Sandel was recently featured in a *Harvard Gazette* article on faculty members whose undergraduate teaching is especially acclaimed by students and colleagues.

'76

Beth Bawnitz is working as a contract administrator at Monogram Industries in Los Angeles.

Rutgers University awarded a doctor of philosophy in nutrition to Lisa A. Cowen.

The Medical College of Pennsylvania awarded an M.D. to Joyce Marie Doonan.

Dr. Jerrold N. Rosenberg was named chief of the physical medicine section at the Hospital of St. Raphael in New Haven, Conn. Jerrold attended medical school at George Washington University.

'77

Until June, Craig Charney was in Paris at the Ecole Des Hautes Etudes en Sciences Sociales working on his doctorate on the history of black nationalism in South Africa. Craig has since returned to Johannesburg, South Africa for his fieldwork.

Jonathan Keller has been appointed publicist in the Boston University Office of Public Relations. Prior to this appointment,

Jonathan worked as host and producer for WRKO-AM Radio in Boston and as special correspondent to *People* magazine.

William J. Robertello received his M.D. from The Medical College of Pennsylvania in May.

Carol Shuchmar is living in New York and is working for the Planning and Development Department of the Port Authority of New York and New Jersey as a demographer. Carol is continuing work on her doctorate in sociology at Brown University.

Janet Weintraub recently completed a three-year registered nurses course at Tel Hashomer in Israel. She is currently working at a community mental health center in Petach Tikva, and will be the first nurse to work at their newly opened day hospital. Janet reports of a reunion with Bonnie Koppell '76, Nada Niv '77, Ruth Schneberg '76 and Ellen Sidransky in Annapolis last summer.

Janna Zwerner moved to Brazil in February with her partner Jziro Rocha. They organized Project B.R.A.S.I.L. (Better Rehabilitation and Socialization in Life), bringing mobility aids and medical equipment for distribution to poor disabled citizens in the states of Minal Gerais and Rio de Janeiro.

'78

David Alexander has been appointed director of publications for SelecTV of California, a pay television system based in Los Angeles. David will assume control over the company's program guides and promotional materials for the Los Angeles and national affiliate markets.

Mark Blecher is at Wills Eye Hospital in Philadelphia, Penn., doing his residency in ophthalmology.

Kenneth Horn, formerly an attorney with Robinson, Silverman, et al., has announced the opening of "Gran Gelato" in New York City. Kenneth's interest in the Italian ice cream dessert was cultivated as a student at Hastings College of Law in California.

Since graduating from the University of Pennsylvania in 1982 with a master of social work degree, Linda Kanner has been working in a drug and alcohol abuse prevention program in the Philadelphia Public School System.

Daniel Klein was appointed assistant professor of psychology at the University of Illinois at Urbana-Champaign. Daniel received his doctorate from the State University of New York at Buffalo in 1983.

Patriot Bancorporation announced the appointment of Mark Wright as assistant vice president and commercial lending officer for one of its member banks, Patriot Bank/Harbor National.

'79

*The Boston Globe* recently featured an article on Stuart Kelter, alias "Dr. Ten Speed." While planning to attend medical school, Stuart makes headlines as a bicycle doctor . . . who makes housecalls.

Lawrence J. Mandel, an employee of Continental Bank in Chicago since 1981, has been promoted to the position of officer in the special industries services department.

Scott Asher Perkins received his M.D. from Temple Medical School and is an intern at Philadelphia Presbyterian Hospital.

Wendy Robinson received a master's degree in Jewish education last May from Hebrew Union College in Los Angeles. She has since moved to Phoenix where she will serve as director of education at Temple Solel in Paradise Valley, Arizona.

'80

Amy Feldman is living in Denver, Colo., where she is a satellite networking specialist for Public Service Satellite Consortium Services. Her husband Loren Finkelstein received his M.A. in communications/public relations from Boston University, and is now a free-lance public relations specialist.

Jonathan W. Harris graduated from Northwestern School of Law and is now associated with the Chicago firm of Altheimer and Gray.

Lisa Hirsch has been living in the San Francisco bay area for the past year and was involved in planning the 1983 Jewish Feminist Conference.

Lisa Morgen, formerly a videotape producer for WCVB-TV News, Channel 5 in Boston, was recently appointed producer/director for the media services department at Digital Equipment Corporation.

'81

Emory University in Atlanta, Georgia awarded the degree of master of arts in psychology to Nancy Allison Blum at the end of the fall 1983 semester.

## Grads

'54

Halim El-Dabh (M.F.A., Music) has been awarded a Research and Creative Activity appointment for summer 1984 by Kent State University. Halim is a composer and professor of ethnomusicology at KSU.



'63

George Giacomakis (Ph.D., Mediterranean Studies) is living in Israel and is executive director and dean of the Institute of Holy Land Studies in Jerusalem. He was formerly on the faculty of the history department at California State University, Fullerton, Calif.

'66

David Scott (M.A., Mathematics) was granted tenure in the mathematics and computer science department at the University of Puget Sound in Tacoma, Washington.

'68

Dr. Alan Ronald Aronson (Ph.D., History of Ideas), professor of humanities in the Weekend College Program, College of Lifelong Learning at Wayne State University, Detroit, Mich., received a fellowship from the American Council of Learned Societies. He is currently at the University of London as an honorary research fellow working on a first exposition and analysis of Jean Paul Sartre's unpublished *Critique de la raison dialectique*, volume two.

Martin Robbins (Ph.D., English and American Literature) recently conducted a Tisch seminar on communication skills for the Hornstein Program. He also spoke at the Publicity Club of Boston on breaking through writer's block.

'69

Dr. Lance Heiko (Ph.D., Physics) served as a visiting assistant professor in the management division of Babson College, Wellesley, Mass. during the 1983-84 academic year.

Ruth Harriet Jacobs (Ph.D., Sociology), chair of the Department of Sociology at Clark University, has published *Button, Button, Who Has the Button?*, a full-length play about the dilemmas and triumphs of today's American women. She is also the author of *Life After Youth: Female, Forty, What Next?*

Rabbi Eric H. Yoffie was named national executive director of the Association of Reform Zionists of America (ARZA). He formerly served as director of the Midwest Council of the Union of American Hebrew Congregations.

'71

Larry Bowman (Ph.D., Politics) has been appointed head of the Department of Political Science at University of Connecticut in Storrs, Conn. He is currently in Jerusalem, at the Truman Institute of the Hebrew University on a Leslie Martin Fellowship.

Lawrence Suid (M.F.A., Theater Arts) is currently writing a history of the Armed Forces Radio and Television Service for the Department of Defense. He is also co-authoring the biography of General K. D. Nichols, who was district

engineer on the Manhattan Project and later general manager of the Atomic Energy Commission at the time of security hearings for J. Robert Oppenheimer.

Mark J. Winkeller (Ph.D., Heller School) was named senior vice president of Liberty Real Estate Corporation, a unit of Torchmark Financial Services, Inc.

'72

Richard Aaron (Rubin) (M.F.A., Theater), entertainment and creative director at the Mallory Factor Agency since 1981, has been promoted to director of operations, special events and meeting division. In addition, Aaron has been named officer of the agency.

'73

Susan Basow (Ph.D., Psychology), clinical psychologist and associate professor of psychology at Lafayette College in Easton, Penn., recently completed a study of eating disorders in college women. Her work was presented at the spring 1983 meeting of the Eastern Psychological Association held in Philadelphia.

'75

George Graham (Ph.D., Philosophy) was appointed chair of the Department of Philosophy at the University of Alabama in Birmingham.

'78

The University of Lowell in Lowell, Massachusetts recently named Dr. Frederick P. Sperounis (Ph.D., Sociology) assistant to the president.

'81

Temple University Press has published a new book by Raymond Arsenault

(Ph.D., History of American Civilization) titled *The Wild Ass of the Ozarks: Jeff Davis and the Social Bases of Southern Politics*. Arsenault holds the rank of associate professor at the University of South Florida.

Tim Clark (Ph.D., Music) was appointed visiting senior professor of music at the St. Louis Conservators of Music.

'82

Dr. Chin-Teh Chang (Ph.D., Chemistry) has joined the General Electric Research and Development Center as a chemist.

'83

Lynn Babcock (M.F.A., Theater Arts) was appointed assistant professor of theater arts at Holy Cross College in Worcester, Mass. She was formerly director of education at the Peformers Ensemble Theater Company of Minnesota.

## Marriages

Elliot S. Maggin '72 to Pamela King, August 1983.  
Alisa Ofsevit '75 to Adam David Eilenberg, June 1983.

Marcia Aron '76 to Steven E. Barryte, July 1982.

Gail A. Fradin '77 to Peter J. Silberstein, January 1984.

Amy Feldman '80 to Loren Finkelstein '80, August 1983.

Ellen D. Freeman '80 to Steven Roth, May 1984.

Pamela Siegel '81 to Kenneth Berk, November 1983.

Jeff Schachne '80 to Susan Snyder '81, June 1984.

Marjorie Leigh Baros '82 to Philip Kabler '82, August 1983.

Yoash Enzer '82 to Susan Stillman '83, July 1983.

Jodi Goldstein '82 to Fred Rothman, August 1983.

Caren Ponty (M.A., Heller '81) to Ira Moskowitz.

Jeffrey Zisk '82 to Janet H. Sherman '83, June 1983.



Births

To **Risa Hirsch Ehrlich '55** and Michael Ehrlich, a son and daughter, Viviana and David, by adoption, December 1983.  
To **Michael D. Bender '64** and Pearl Bender, a son, Alex Philip, June 7, 1983.  
To **David Arvedon '69** and Maelyn Arvedon, a son, Andrew Lowell, January 10, 1984.  
To **Claudia Jacobs '70** and her husband, Gary Vassar, a daughter, Emily Justine, May 5, 1983.  
To **George P. Zelenka '70** and **Roslyn Smith Zelenka '71**, a daughter, Kathryn Louise, May 24, 1983.  
To **Ian Lustick '71** and Terri Lustick, a daughter, Hilary, December 13, 1982.  
To **Adele Wolfson '71** and Daniel Seeley, a son, Ethan Benjamin, April 10, 1984.  
To **Rochelle Abell '72** and **Dan Weisz '72**, a daughter, Sara Amy Weisz, February 11, 1982.  
To **Annette Tarnapol** **Lawson '72** and Paul Lawson, a son, Aaron Jacob, by adoption, March 1984.  
To **Carol Friedlander Lechan '72** and **Ronald M. Lechan '72**, a daughter, Arianna Felice, September 11, 1983.  
To **Karen Giguere Louie '72** and Eric Louie, a son, Andrew David, July 17, 1983.

To **Robert Mark '73** and **Jill Gordon Mark '75**, a son, Ari Gordon, October 7, 1983.  
To **Daniel S. Klein '74** and Shelley Klein, a daughter, Lauren Elena, January 11, 1984.  
To **Rabbi Michael Paley '74** and Ann Dobrejcer, a daughter, Briyah Ariel.  
To **Daniel Abelman '75** and Melinda Abelman, a son, Jesse Abraham.  
To **Sandra Charton '75** and Thomas Collins, a daughter, Samantha, July 30, 1983.  
To **Zachary E. Gerut '75** and Robin Gerut, a son, Benjamin Samuel, April 1984.  
To **Jan Graff Loew '75** and Jerry Loew, a son, Benjamin Andrew, December 9, 1983.  
To **Ruth Horwitz Mindick '75** and Burton Mindick, a daughter, Susan Felicia, October 12, 1983.  
To **Marcia Rosenblatt Weisbrod '75** and **Glen Weisbrod '75**, a son, Eric Matthew, April 23, 1983.  
To **Julie Levitan Rockowitz '76** and Noah Rockowitz, a daughter, Leora Civia, February 15, 1984.  
To **Brian Rogol '76** and **Rhonna Weber Rogol '76**, a son, Joshua Meir, October 31, 1983.

To **Dalia Kaminetzky Lavon '77** and Ben Lavon, a daughter, Hannah Tamar, October 28, 1983.  
To **Jay Pabian '77** and Audrey Pabian, a daughter, Jennifer Brooke, March 30, 1984.  
To **Jodi Ferretti-Shochet '79** and **Robert B. Shochet '79**, a daughter, Erin Jennifer, August 24, 1983.

**Michael Glass '70** died of pneumonia on February 24, 1984 in New York. Michael was an art director for station WABC (Channel 7) and had won an Emmy award in 1981 for his work on "Good Morning America." He is survived by his parents, a brother and sister.

Obituaries

**Rabbi Matthew I. Derby '55** died on February 20, 1984 after a lengthy illness. He is survived by his wife, Susan, his mother and three children.

**Amy Jean Kuntz '62**, who attended Brandeis for two years, died February 15, 1983. In addition to teaching mathematics at the Ohio State University of North Carolina, Amy was a distinguished biostatistician at the Veterans Administration, which awarded her a Special Contribution Award in 1982, shortly before her death. Amy is survived by her husband **Harry Rosenberg** (M.A., 1963, Anthropology), her parents and two sons.

**Susan Schwartz Siegel '62** died on April 5, 1983. She leaves two children, Andrew and Perri.

Dear Alumni Editor:

I was truly elated to read (*Review*, Spring 1984) that I was in my last year at Harvard Medical School. Delight turned to anxiety, however, as I realized that I had done nothing to obtain a residency or internship. The Medical School was able to set my mind to rest on that score by informing me, without great ceremony, that they had never heard of me: that I was ineligible for a residency and that, indeed, I was not in my last (or any) year at the School.

It is my sad duty to pass this word on to you. My friends and classmates, I hope, will share my disappointment. My parents are crushed at having lost this one last chance to have a doctor in the family. It was, I must admit in retrospect, premature and foolish of me to send them the news of my upcoming M.D. without checking with Harvard first.

But we live and learn. Right now I live to learn what new and unforeseen milestones my fellow alumni and I will have reached by the next edition. Thank you for a good chuckle.

Yours with tongue in cheek,  
Carl F. Barnes, '80  
Somerville, Massachusetts

*Editor's note: We goofed! Carl is entering Harvard's Law School.*

Newsnote	News
What have you been doing lately? Let the alumni office know — and send them photos and news that would be of interest to your fellow classmates.	
We invite you to submit articles, photos or news of interest to the Alumni Office for review.	
Name _____	<input type="checkbox"/> Please check here if address is different from mailing label.
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In a new introduction, Kedourie reaffirms his interpretation of Britain's policy in the Middle East and addresses historical questions raised by discussion of his views when the book first appeared in 1970. Unavailable for several years, the book is essential for a balanced overview of Middle Eastern history.

Elie Kedourie, Fellow of the British Academy and Editor of *Middle Eastern Studies*, currently Professor of Politics at The London School of Economics and Political Science, has written many books on the Middle East, the most recent of which is *Islam in the Modern World* (1981).

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# Brandeis Review

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The Brain  
Challenge to Science  
in the 1980s

# Brandeis Review

Spring 1985

Volume 4

Number 2





*Science comes by observation, not  
by authority*

*Leonardo Da Vinci*

---

The mystery of the human mind has challenged the imagination through the centuries. Plato saw the brain as a microcosm of the universe, calling it the "divinest part of us and lord over all the rest."

What the brain lords over, and how, is still an enigma. However, scientists are beginning to fit together the pieces of the puzzle and working toward the day when the whole pattern of the brain may be comprehensible.

The quest has intensified in the last decade. Today, neuroscience, or the scientific study of the brain, has evolved into a major interdisciplinary field of research.

At Brandeis, biologists, chemists, biochemists, psychologists and linguists are engaged in research that adds to our knowledge of the way the brain functions. The field of neuroscience is burgeoning. Responding to the growing interest of scientists and students, Brandeis has added a neuroscience program to the curriculum.

The articles in this issue place neuroscience in the context of the growth and development of science at Brandeis, provide a historical overview of the field, and demonstrate the interdisciplinary nature of the research.

The two introductory articles by University Professor Saul Cohen and by associate professor of biology Eve Marder '69 trace the evolution of neuroscience since the turn of the century and its birth and development at Brandeis. Cohen, who was instrumental in shaping the school of science at Brandeis, discusses the special combination of philosophical vision and circumstances that gave direction to a young university in search of its identity. Marder provides an overview of past and current research in neuroscience.

The other articles, written by Brandeis faculty, examine human behavior from the genetic, or molecular level, to human perception in outer space. Professor Waltz's article on artificial intelligence does not fall strictly within the perimeters of what is known as neuroscience, but illustrates how modern technology is using the brain as its model in developing new computers. The article describes the limits of that technology and its dangers.

Space limitations prevent us from including articles by other faculty members who are doing equally distinguished work in the field of neuroscience.

Among them are Professors Herman Epstein, who has been studying brain development and its correlation with the maturation of cognitive brain functions; Ray Jackendoff, who studies the way we transform visual information into linguistic expression; Peter C. Jordan, who uses computers to construct mathematical models to interpret and design complex experiments which focus on chemical transmission of information in the nerve cell; John Lisman, who has been looking at the way cells of the visual system absorb light and generate electrical signals; Christopher Miller, who studies ion channel proteins in pursuit of one of the central questions in biophysics: what is the relationship between function of a protein and its underlying molecular structure; and Kalpana White, whose field is genetic influence and development of the nervous system.

Neuroscience is clearly one of the scientific frontiers of the 1980s and this relatively small university with major research programs is sharing the excitement of the quest.

Nada Samuels  
Editor

# Brandeis Review

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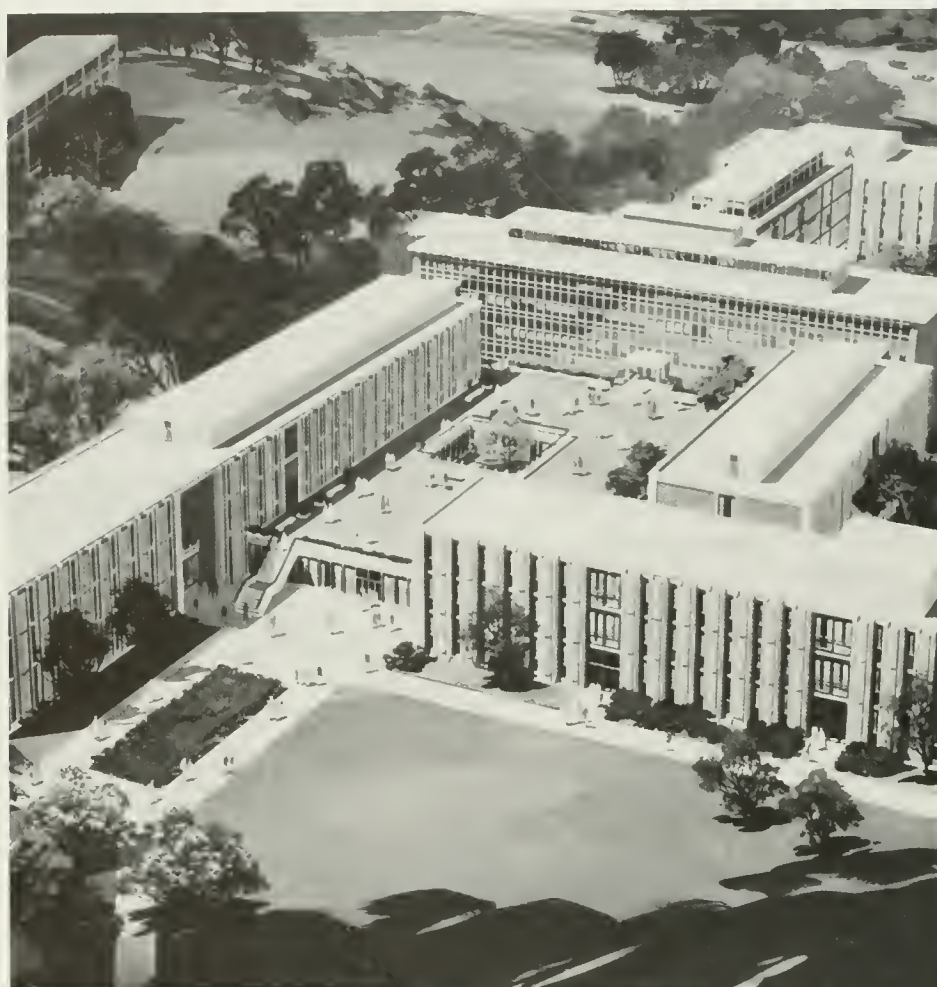
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# Art, Science, Neuroscience, and Brandeis

by Saul G. Cohen



*Above photo: By 1965, when the science complex was inaugurated, Brandeis had already established a strong reputation in the sciences. In 1982, the Conference Board of Associate Research Councils ranked the Brandeis scholarly achievements among the highest of research faculty members at private universities. Within the last few years, Brandeis has embarked on a new graduate program in neuroscience and graduated its first biopsychology concentrators. Much of this growth and success are the result of decisions made during the early years of Brandeis' existence when the direction of science programs was set.*

University Professor Saul G. Cohen is an internationally recognized chemist who has played a leading role in the shaping of Brandeis, particularly in the sciences. He was the first chairman of the School of Sciences and played a critical role in its development as well as that of the Graduate School of Arts and Sciences. He has also served as the first dean of the faculty and on numerous committees. In 1956, he was elected a Fellow of the American Academy of Arts and Sciences and in 1972 was presented the James Flack Norris Award by the American Chemical Society for outstanding achievement in teaching. In 1974 he was named Brandeis' first University Professor, a position established by the Board of Trustees for an individual who has demonstrated exceptional scholarly work.

How and why did Brandeis University, starting *de novo* with a strong liberal arts education goal, combine that ideal with a major effort in research at the forefront of twentieth century science? To ask that question is to express a common misconception about the goal of "liberal education," which was current at the time of Brandeis' founding and was the problem addressed in C. P. Snow's Rede Lectures, "The Two Cultures," a decade later. He was a scientist and a distinguished author, an academic and a public servant. He found it dangerous that the intellectual life, and thus much of the practical life, of our society was increasingly split into two polar groups, scientists and humanists separated by a gulf of incomprehension and, sometimes, hostility.

The phrase "liberal arts and sciences" is often interpreted incorrectly, with the word "liberal" describing only "arts," while it really modifies both "arts and sciences." The limited and erroneous interpretation is of modern origin. As far back as Aristotle and Lucretius, science, the study of nature, was an integral part of philosophy and education. The definition of "art" was human workmanship, as distinguished from works of nature. Thus the phrase "arts and sciences" refers to the two kinds of works, both essential studies of a university, essential components of an education, and "liberal" applies to both. Further, scientific study is a human activity, whose constructs are "art"; foibles which characterize other human activity also find expression there.

Let us consider then, not arts and sciences, but non-science and science. In non-science, facts and their assured relevance are less readily ascertained. Initial assessment in terms of preconceptions and rejection of contrary evidence may lead to self-deception and then to deception

of others. Danger attends policy and action not based on fact, persisted in because it is human to retain authority, and not admit error. In science, too, work is based on preconception, hypothesis, usually derived from facts, but results may, at times, be interpreted incorrectly. Here too, fallible man may cling to preconception, and authority may persist even as new facts call for a contrary interpretation. But in science nature stands as an implacable witness, and soon, with neutral instruments and independent investigators, the force of evidence prevails. A new "truth," really a superior consistency, comes to the fore, and becomes the basis for further study. But "truth" in science often derives from and applies to restricted fields of study. Application of science to technical aspects of public policy is necessary, but may be deceptively assuring. Such problems are subject to complex factors, and unrecognized or neglected may lead to unforeseen harm.

Another important difference arises from chronology, the difference in the periods of human history in which advanced knowledge was attained in the two areas. Beauty of expression, ethics and laws of the Bible, insights in epic and dramatic poetry into the character, behavior and fate of man, and ancient philosophical analysis of human, political and social conditions remain excellent models for contemporary efforts in those areas. Also, for two thousand years after Aristotle, natural science, by no means at a primitive level, changed relatively little in character, and remained a study accessible and of interest to scholars and educated people whose primary calling lay elsewhere. However, in the past few centuries advances in science burst the bounds of past learning, and rapidly continue to expand our understanding of nature. Paradoxically, or perhaps not, this vast new knowledge, with its ever increasing impact on society and the planet, appears to become less accessible, less a part of the

individual's decision-making apparatus, precisely when the opposite should be true. At a time when the scientific has become a much greater part of all knowledge, it has become a lesser part of the non-scientists' education, leading to a dangerous gap, in effect, to a public thus partially illiterate, lost in the modern world. These circumstances make it essential that a university both take its place in the forefront of this major contemporary intellectual endeavor, and communicate scientific knowledge and understanding, and its relevance to the human condition, to a much broader extent than has been done.

In the first few years of Brandeis this two-fold effort in science was not seriously considered. The major faculty appointments were in the humanities and social sciences. (General education was emphasized, and in science this comprised lectures of a descriptive character in physics and biology.) The intention was to offer sufficient courses to fulfill undergraduate requirements for concentration in biology, chemistry, mathematics, and physics, while courses in other scientific fields would also be offered. There were no facilities for research, and those faculty members first appointed to teach science had little experience in independent research. Thoughts of initiating original research appeared quixotic. However, President Abram L. Sachar spoke of intentions for a great university. Would that be feasible?

It was a time of great change, a watershed in American society. Through the 1940s universities were sadly restrictive in their appointments, like resort hotels in their guests, clubs in their members. The Great Depression revealed need for new ways of dealing with severe social problems, and new government agencies admitted hitherto largely excluded groups. In World War II help was sought from all sources, and national defense programs called on scientists and scholars previously not warmly welcome in industry and academe. New relationships were established,

and rendered firm by the largely unarticulated recognition that the logical result of polite anti-Semitism was the insane barbarism of Nazism. Thus for the first time it became likely that a university of quality established under Jewish auspices would be welcomed into the mainstream of academic institutions.

In order to develop a program of research and teaching which would be important but feasible in a new small university, choices would have to be made. As chairman of the School of Sciences I urged on the Board of Trustees and the faculty in science that instruction and appointments be limited to selected areas in the four major subjects listed above, and that courses in astronomy, geology and geography not be offered. The idea was to have a small number of larger groups engaged in mutually supportive research, rather than a larger number of small diverse groups. Important new interests and contributions of physicists and chemists to biology would be taken as indicating the direction to be followed in that field. Laboratory biology would be developed and field biology and ecology would not be pursued. At a time when "big physics," requiring colossal equipment, was dominant, we would restrict ourselves initially to theoretical physics. Later superb experimental research would be undertaken in low energy physics.

Scholar-teachers would be sought, who had already succeeded in original independent research and would be eager to initiate research programs in the limited circumstances of Brandeis, and would also be fully committed to undergraduate education. Indeed, in rapidly developing science the best undergraduate teaching would be done by practitioners at the forefront. Participation in such research would benefit undergraduates greatly. But such faculty could be attracted only if formal graduate programs, a Graduate School of Arts and



Sciences, was in the offing; heady dreams under the circumstances.

There were favorable elements and there was urgency. We knew that it is exceedingly difficult to convert an established undergraduate college to an institution also strong in graduate studies and research. In that case research scholars could be added only gradually, and a "critical mass" could not be reached. In such an institution the views of older non-research faculty would dominate, and a high level of scholarship and university status would not be achieved. That was a pattern we did not want to follow. Since there were only few faculty present in the early years, newly appointed research oriented teaching staff could determine the ambience, the program and the appointments. The expansion of higher education in the post-World War II period, the large number of scholars who had gained research experience and not received academic appointments, and growing support by government agencies of university-based science, would make such a development possible. A window of opportunity was open, briefly.

While this reasoning may appear obvious now, 30 years ago there was a serious debate as to whether Brandeis should strive to become a quality college, or a university, centered on college and graduate school of arts and sciences. With little money on hand and essentially no facilities, it was held by many in the faculty and Board that even the former might be overly ambitious, and the latter impossible. My counterargument was simple: If we set out to build a college, essentially restricted to teaching of undergraduates, the faculty who would come and stay would, with few exceptions, remain little known in the academic community. Therefore it would be exceedingly difficult for the school to demonstrate high quality. The patina and intangible qualities of the excellent small college are not readily acquired, and we knew that

recognition is prerequisite for support. On the other hand, by seeking and appointing about 15 scholar-teachers each year, we thought that in less than one generation a faculty would be assembled whose research and scholarship would be held in esteem by their peers in the academic world. Consequently the institution would be recognized and accepted as a university of quality. With this achievement properly publicized, it would be easier, but still onerous, to obtain the needed support. Paradoxically the apparently more complex, difficult and demanding task was more likely to be accomplished successfully. This argument, supported by President Sachar, prevailed, and graduate programs were introduced in chemistry, English and American literature, history of ideas, Near Eastern and Judaic studies and psychology soon after the first A.B.'s were granted, inaugurating the Graduate School of Arts and Sciences.

We began, in the early '50s, to appoint the core science faculty. David Falkoff, a highly original theoretical physicist at the Lincoln Laboratory, joined us and soon was recommending and attracting a nucleus of scholars in that area. Albert Kelner, who had discovered the phenomenon of photoreactivation, brought his work and interest in the burgeoning field of genetics to Brandeis, and offered council in the development of faculty in experimental biology. Oscar Goldman came from MIT and soon after he attracted three young mathematicians from their fellowships at the Institute for Advanced Studies, the Harvard-MIT mathematics colloquium became the Harvard-MIT-Brandeis mathematics colloquium. Herman Epstein, physicist-become-biologist, came from the University of Pittsburgh and brought the biophysicist's viewpoint to biology, which would be important for the neurosciences. Ricardo Morant and Richard Held began the development of experimental and physiological



psychology. Leo Szilard, a physicist of renown for his work related to the atom bomb, then devoting himself to biology, writing, and founding the Council for a Livable World, visited often from the University of Chicago and was an inspiring catalyst. When Lewis Rosenstiel was prepared to make a large grant for research on Hodgkin's disease, which we could not undertake, he was readily persuaded to make the grant "in support of research in the natural sciences with primary emphasis on biochemistry." This led to the appointment of Nathan Kaplan, from Johns Hopkins, and Martin Kamen, from Washington University, St. Louis, and development of biochemistry. In this way groups of highly motivated scientists grew, working in contemporary areas of science. Brandeis now exists as probably the only university, founded under private auspices in the United States in the twentieth century, to have achieved high status in the academic world. That there have not been others means that it is a difficult and costly task — and Brandeis needs much support, as it reaches, after three and a half decades, the scholarly level of the ivy league universities, with half or



more the size and one-tenth or less the endowment of those institutions.

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Neuroscience is an interdisciplinary study, attracting investigators experienced in biology, chemistry, physics and psychology. After World War II marked advances were made, including mapping and study of properties of areas of the brain. This progress attracted alert students, and, when outstanding young scientists were sought for appointment at Brandeis, in several cases they were found in areas of this developing field.

While not a neuroscientist, I am now applying my experience in enzymic mechanisms to a problem in this important area. Modern neuroscience may be said to start with the work of Volta in Italy at the end of the eighteenth century. He demonstrated the electric nature of the nerve impulse, and along the way invented the battery and the electric current. For more than 100 years after that it was thought that the electric impulse, coming to the end of a nerve, led by itself to the observed response. Then, in the first

four decades of this century, brilliant insights and simple, elegant, difficult experiments, associated with the names Loewi, Feldberg, Dale and Nachmanson, showed that the electric current leads instead to the emission of chemical compounds at the nerve end. It is action of these chemical neurotransmitters on receptors located on adjacent muscle or nerve that leads to the response. An enzyme closely associated with the receptor may then alter the transmitter, ending its action. Such chemical intermediacy allows for control mechanisms, and the action of drugs, medicines, and poisons.

The first transmitter to be isolated, a very widespread and important one, was acetylcholine, and the enzyme which ends its action is acetylcholinesterase. This transmitter is a small, positively charged, thoroughly understood molecule. The enzyme, a complex protein, is 500 times as large and not well characterized, but much interest focuses on its active site, the small part at which the transmitter binds and is converted to inactive products. The receptor at which the transmitter acts is a complex of proteins even less well characterized, and recently much studied. A chemist, J. B. Cohen, isolated and

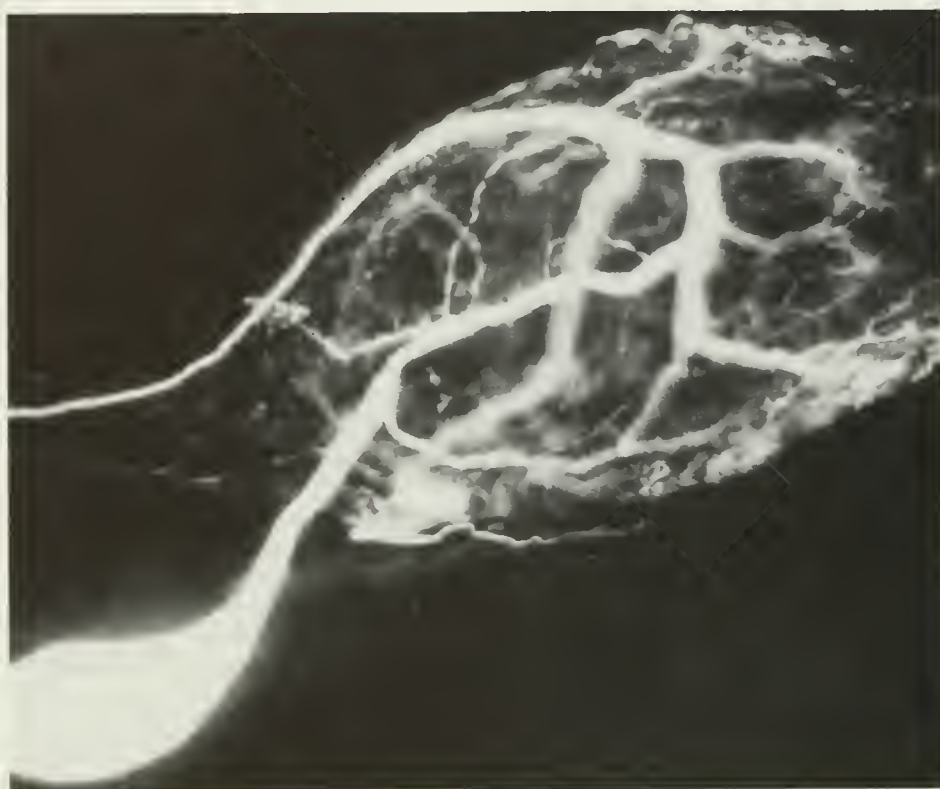
studied the membrane bound receptor in the early 1970s, and subsequently suggested that he and I study the enzyme in a collaboration which would complement our personal relation. This enzyme had long been studied, worldwide, by enzymologists, toxicologists, physiologists, entomologists, physicians, etc. From the first isolation, 40 years ago, it was accepted that there is a negative charge in the active site of the enzyme at which the positive group of the transmitter binds, and such a description is constantly reproduced in texts and applied in research. However, after many experiments we concluded that this view, long become dogma, is inaccurate, and there is no negative charge in the binding site. We are now attempting to characterize the site by use of uncharged reagents. Accurate knowledge of the structure of the active site is needed, both for its own sake and for the guidance such understanding gives.

New knowledge can be used for good or ill. Literally thousands of compounds have been prepared over the years and evaluated as insecticides and war gases, their toxicity arising from their capacity to inactivate acetylcholinesterase. But, some also have therapeutic value. Extracts of the ordeal bean, so named from their application in Africa as a test for witchcraft, led to medicinals of use in treatment of glaucoma and myasthenia gravis. Compounds prepared for possible use as deadly nerve gases have use in cancer chemotherapy by mechanisms unrelated to their anti-cholinesterase action. It seems likely that the results of our studies, particularly the work on novel uncharged reversible inhibitors, will be benign, with a possibility of leading to cholinesterase moderating agents of therapeutic value for neurological problems which become more prominent in an aging population. Our view of the active site is leading along a new path which may lead, or may not, to good. Life is short, Art and Science are long, the pursuit of nature enthralls, enriches and renews. ■



# Neuroscience: Past, Present, and Future

by Eve Marder '69



*Figure 1: The structure of a single neuron from a crab. The neuron was injected with a fluorescent dye that fills all of its processes, and then photographed using a fluorescence microscope. Note the large oval cell body, and the many branching fine processes. Photograph courtesy of Scott L. Hooper, a graduate student in the biology department (Marder laboratory).*

*The increasing frequency of the word "neuroscience" in college catalogs, directories of learned societies, and titles of scientific journals is an indication that the field of neuroscience has become important in the scientific community during the past 15 to 20 years. Neuroscience is also attracting more attention from the popular media (witness the recent television series, *The Brain*) because it is a field in which advances in basic research are frequently coupled to advances in understanding of many significant human mental and neurological disorders. This issue of the Brandeis Review highlights some of the neuroscience research at Brandeis, and illustrates the diverse approaches taken by neuroscientists attempting to understand the nervous system.*

*Eve Marder, associate professor of biology, received the McKnight Scholars Award in Neuroscience, the Sloan Fellowship in Neuroscience and several research grants from federal agencies including the National Institutes of Health. She is serving on the editorial board of the Journal of Experimental Biology and is a panel member of the Neurological Sciences Study section for the National Institutes of Health. A 1969 graduate of Brandeis with an honors degree in biology, she joined the university's biology department in 1978. Her research has been published in many professional journals.*

Before this century questions concerning the nature of thought, perception, learning, mind, and the principles underlying behavior were the province of philosophers or theologians. The structure of the brain was largely a mystery, as was its function. The first clue that the brain was a highly ordered and complex structure came approximately at the turn of the century as the first great neuroanatomists, including Ramon y Cajal, started applying stains to sections cut from different regions of the brain. Using the Golgi technique, which selectively stains only a few neurons at a time, and visualizes the form of a single neuron (nerve cell), Cajal and others saw, for the first time, the fantastic complexity of neuronal shapes and structures. They saw that neurons can have extremely complicated structures, with many branches (Figure 1). They saw that neurons in different areas of the brain had different anatomical forms. They saw in some areas of the brain that neurons were laid out in parallel repeating arrays. Current estimates are that the human brain consists of 10-15 billion neurons.



*Figure 2: The distribution of serotonin-containing neurons in the larval nervous system of the fruit fly, *Drosophila*. The FMRFamide-containing neurons were stained using an antibody that recognizes FMRFamide, visualized with a fluorescent label, and photographed. Photograph courtesy of Dr. Kalpana White, associate professor of Biology.*

Many years later, with the advent of the electron microscope, neuroanatomists were able to describe the points of communication among neurons (synapses) and to describe the small sac-like synaptic vesicles in nerve terminals. We now know that these synaptic vesicles are the sites of storage for neurotransmitters, the special chemicals responsible for the communication among nerve cells. The last revolution in neuroanatomy occurred in the past 10 years. By using antibodies (protein molecules that bind to specific molecules) of defined specificities, it is now possible to pinpoint the precise location of different neurotransmitters within the complex maze of brain tissue. For example, with an antibody that reacts with the neurotransmitter, FMRFamide, it is possible to visualize all the FMRFamide-containing neurons in the larval *Drosophila* nervous system as was done by Dr. Kalpana White here at Brandeis to produce the picture shown in Figure 2.

These techniques, and others, have allowed an extremely rapid explosion in our knowledge of the chemical composition of the brain. It is now clear that there are more than 50 different substances in the brain that are used as neurotransmitters by different neurons. One of the great puzzles of neuroscience today is why there are so many different neurotransmitters present in the brain. Some of these neurotransmitters are molecules such as acetylcholine, serotonin, dopamine, or glutamate that are synthesized only in some neurons from precursors that are found in all cells in the body.

There is another group of neurotransmitters that is now the subject of an enormous amount of interest. These are the neuropeptides that start out as large protein molecules that are then clipped into smaller biologically active pieces. In recent years the genes coding for some of the large precursor proteins have been identified and cloned, an example of the impact molecular biology has already had on neuroscience. In the future it should be possible not only to locate key chemicals in the adult brain, but to understand how the distribution of

neurotransmitters in different brain regions is brought about during development of the nervous system.

As nerve impulses, or signals, pass from one nerve cell to another, neurotransmitters are released by neurons into the fluid space that surrounds all cells, and then act by binding to specific protein molecules (receptors) found on the surface of the target cells, be they neurons, muscle, or gland cells. Properties of these receptor molecules are of great interest because they define the type of response to neurotransmitters that a cell has. Consequently they have been studied since the turn of the century. The first of the great pharmacologists, including Sir Henry Dale and Otto Loewi, discovered that different substances excited or inhibited different biological tissues. The acetylcholine receptor (a protein molecule that binds the neurotransmitter acetylcholine and produces a change in the cell that has the receptor) was first defined by the ability of acetylcholine to produce movements or tension in muscles. Although the existence of receptors was inferred on the basis of elegant and simple



experiments at the turn of the century, it was only about 10 years ago that the acetylcholine receptor was purified, and only in the past two to three years that the genes that code for the acetylcholine receptor have been characterized. In this case, the technological breakthroughs of recent years have provided verification of biological insights achieved by brilliant scientists working with exceedingly simple techniques 60 to 80 years ago.

An important property of many neurons is their ability to generate electrical signals, or action potentials. These action potentials are nerve impulses that can propagate over long distances, and thus carry information between the central nervous system and the periphery. A good understanding of how action potentials are produced was obtained by inserting tiny microelectrodes inside nerve cells to record their electrical activity. Another set of electrical signals are synaptic potentials (excitatory or inhibitory changes in membrane potential) that result from the binding of neurotransmitters to receptors. Some synapses are excitatory, and tend to increase the likelihood that the neuron responding to the neurotransmitter will fire an action potential. Some synapses are inhibitory, and tend to decrease the likelihood that the neuron responding to the neurotransmitter will fire an action potential.

Because neurons influence the behavior of other neurons, this provides the basis for the notion that organized neural circuits *integrate* information, in other words, act as decision points for information processing in the nervous system. Although enormous experimental and theoretical efforts have been made in this area, it is fair to say that we have only a primitive understanding of how signals are processed by large groups of neurons, either to extract information from the environment, or to produce complex motor tasks.

What then are the tasks that all nervous systems perform? One task

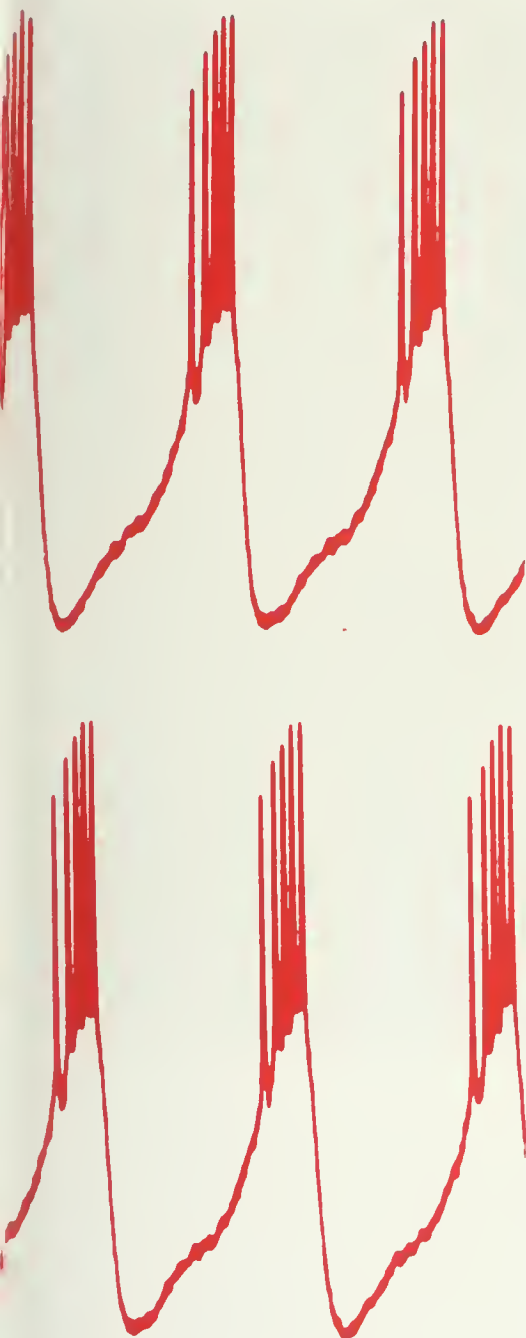
is to transduce sensory signals from the environment and then carry those signals into the central nervous system where they are processed. There are neurons that respond to light, and this is the subject of research carried on in the Lisman laboratory here at Brandeis. There are neurons that respond to pain, others that respond to stretch in muscles. To see an image, information from all the photoreceptors of the retina must be integrated and processed in many steps. This is a process that is being widely studied today, and is only incompletely understood.

Another task the nervous system performs is to produce behaviors. Motor neurons are neurons that connect to muscles, and control their contraction. Many rhythmic and repetitive behaviors (such as breathing and walking) are controlled by neural circuits that act as central timing devices for the behavior. In vertebrate animals (such as humans) these neural circuits are found in the spinal cord or brainstem, and may be activated or shut off by higher brain centers, or by sensory stimuli. In invertebrate nervous systems where these kinds of circuits have been best understood, it is clear that many repetitive, rhythmically active circuits are driven by pacemaker neurons that are rhythmically active (Figure 3). They in turn excite and inhibit other neurons, which alternately produce contractions in antagonist muscles (e.g., the muscle that raises and lowers a leg).

Most neurons in any nervous system are neither sensory nor motor; rather they are interneurons (carry information from one neuron to another neuron). Most are in the central nervous system, or brain, where the neuronal circuits are least well-understood. In the brain of humans there are neuronal circuits that are responsible for the complex cognitive functions that are most difficult to understand: those of memory and language. As will be seen in the other articles in this issue, those problems can be addressed in two very different ways. It is possible to study human



*Figure 3: Intracellular recording from a PD neuron from a crab. Note the rhythmic bursts of activity. Neurons like these act as*



*pacemakers or central oscillators for many rhythmic motor systems. Recording courtesy of Scott L. Hooper.*

behavior (see Wingfield and Zurif) or to study simpler systems (see Hall and Levitan).

In the past 10 years the field of neuroscience has grown from the convergence of a number of disciplines. At many universities there are now umbrella graduate programs of study that connect faculty members in different traditional academic departments. At Brandeis, the neuroscientists are largely found in the biology, biochemistry and psychology departments. The recent formation of the Neuroscience Graduate Program has become an important bridge between departments. At many undergraduate institutions there are now majors in neuroscience (usually named biopsychology or psychobiology at the undergraduate level). At Brandeis we graduated our first biopsychology concentrators in 1984.

At the 1984 Annual Meeting for Neuroscience there were more than 7000 scientists in attendance. Some of these were studying human cognitive functions. There were neuroanatomists, pharmacologists, electrophysiologists, peptide chemists, molecular biologists. Others were experts in a variety of neurological diseases, mental illnesses or behavioral disorders. This diversity highlights and pinpoints the reason for the tremendous excitement and growth in the field today. It is beginning to be possible to imagine that many of the problems or questions that seemed unanswerable a few years ago will be amenable to understanding. Many of these problems will be addressed by multidisciplinary approaches, drawing on conceptual frameworks and techniques of widely disparate areas of biological research.

Enormous progress has been made towards understanding the etiology of diseases such as myasthenia gravis and multiple sclerosis by basic neuroscientists who were primarily interested in characterizing the proteins and lipids of the nervous system. Recent advances in understanding the immune system

and in molecular biology enabled neuroscientists to begin untangling the causes of multiple sclerosis and myasthenia gravis. In the case of some human neurological genetic disorders, the genes that are responsible for the disease have recently been located and cloned. Work on the neuroscience of aging ranges from the behavioral level (see Wingfield and Zurif, this issue) to neurochemists working to isolate and characterize biochemical changes that occur during aging.

The first theories about the biochemical bases of mental illnesses appeared about 20 years ago. These initial speculations were accompanied by the discovery of potent pharmacological agents that are now used therapeutically in the treatment of the mentally ill. With a better understanding of how neurotransmitters are metabolized in different brain regions we are approaching the time when the biochemical basis of some mental illnesses will be understood.

It is perhaps fair to say that neuroscience in 1985 has come further and faster than anyone might have dreamt possible in 1945 or even in 1965. There are disagreements among neuroscientists about which of many present and future directions will be the most productive. There are discussions about what body of knowledge is the most important and valuable to teach students. In a field that is growing and changing so quickly these debates are likely to continue. One might even argue that the neuroscientists of the future will need to be broadly versed in all fields of experimental and theoretical scientific discourse. There are many problems that one can imagine being able to explain in the years to come, where a glimmer of a solution is already apparent. There are others that seem less likely to be explained in biological terms in the near future. But judging from past history we should expect the next 20 years to bring profound new insights into the structure and function of the nervous system, and with these new insights, many surprises.



# Gene Manipulation of the Fruit Fly Provides Clues to Control of Nervous System

by Jeffrey C. Hall



*Scientists have discovered that by manipulating the gene formation of the fruit fly, they can uncover important information useful to the understanding of the nervous system of humans. Learning which genes program what portions of the nervous system, together with studies of the biochemical composition of genes, may help us understand how many other lower and higher organisms are programmed for simple and complex actions.*

*Jeffrey C. Hall, associate professor of biology, does research in the genetics of the nervous system of the fruit fly (*Drosophila*). His findings have been published in numerous professional journals. He has held National Science Foundation and National Institutes of Health fellowships and was awarded the National Institutes of Health Research Career Development Award.*

For researchers in genetic neurobiology who seek understanding of how genes contribute to the building and functioning of a nervous system, the fruit fly is the greatest invention since the joy buzzer.

The little fly (*Drosophila*) has been for many decades a favorite organism for genetic experiments providing clues to gene changes. Tracking those changes enables us to see how the alterations affect the organism's form and function, in addition to providing the means of manipulating both mutated and normal genes.

What does this have to do with the nervous system and behavior? A great deal.

Manipulating genes in the fruit fly has uncovered important information about the nervous system. Researchers are finding that behavior can be genetically dissected and are discovering which genes program specific portions of the nervous system. Probing the biochemical compositions of the relevant genes should help us enormously in understanding how animals perform simple and complex actions.

The genetic study of the behavior of the fruit fly came into prominence in the 1960s when several investigators found mutant strains that behave abnormally. Defects found among the offspring of parents that had been treated with mutagenic agents (such as special chemicals) ranged from abnormal reflex responses to abnormal performance of complex tasks. In the former category are mutants that fail to rush toward light (as normal flies do), whereas the latter includes the inability to learn or remember normal responses to stimuli.

Recently, these studies, have begun to suggest that the nervous system's form and function involve mechanisms that are to a degree universal. We can probe now some of the mysteries of mammalian behavior by applying the same genetic principles and techniques used on lower invertebrates. Some examples that might back up this hypothesis come from work being done at Brandeis.

In developmental biology there is much excitement over some very "old" genes. It has been found that through specific mutations, the fly's basic body plan can be changed. These experiments revealed that a normal dipteran insect (having two wings) can, through gene manipulation, develop four wings. Also, the fly, through the same process of gene manipulation, may develop legs that grow out of abdominal body segments. The result is an eight-legged fly. More severely mutant forms of these genes result in embryos that have been transformed into something totally different. That is, instead of looking like a rather advanced organism in the evolutionary sense, this abnormally developing fly can be transformed into something more primitive. It is superficially more like an annelid worm than a fly.

In studying mutants of this type we see that genetic aberrations define genes which play key roles in the basic body plan of an organism. It is not yet known what such a gene can be doing at the biochemical level, but several investigators are remarkably close to finding out.

The exact structure of the associated proteins, and how they could be involved in mediating fundamental events during early embryology, are not yet known. It is striking, however, to note that certain of the gene copies, expressed in developing tissues, are especially concentrated in the central nervous system.

The potential significance of these "pattern formation" genes in *Drosophila* is already recognized. Biologists who investigate these functions have found important similarities between parts of these genes and DNA sequences in many other organisms, including lower invertebrates as well as vertebrate organisms. This series of discoveries, which some view as mind-boggling, is definitely not to be expected of a random DNA sequence, isolated from some organism. The genetic information encoded within portions of this DNA is now known almost certainly to provide instructions used to produce a protein of known function which might be involved in regulating the expression of other genes.

These results could mean that pattern formation genes may be so fundamental that they have been conserved during evolution to an extent no one would have thought possible. In reflecting on these discoveries, we realize that even we are not entirely unlike insects and other invertebrates. We all are segmented, to a degree, if we think about our backs and spinal columns. The segmental nature of such structures emerges clearly during the relatively early stages of our own embryonic development.

The complexity of the fly's nervous system does not, of course, rival our own. Certainly *Drosophila* and mammals must part company at some stage of the nervous system's life cycle (though they may share certain molecular mechanisms of neural assembly at very early stages). But we and the fly are connected at least in terms of how we perform some of our complex actions.

The little fly can learn. This is striking, in part because it disproves that all *Drosophila* behavior is innately determined. For example, a male *Drosophila* that courted a



fertilized female (who rejects his mating attempts and who also emits certain anti-aphrodisiac odors) will rarely try to court a subsequent female of this type. It is as if he remembers that the courtship inhibitory smell means that it would be a waste of time for him to court another fertilized female.

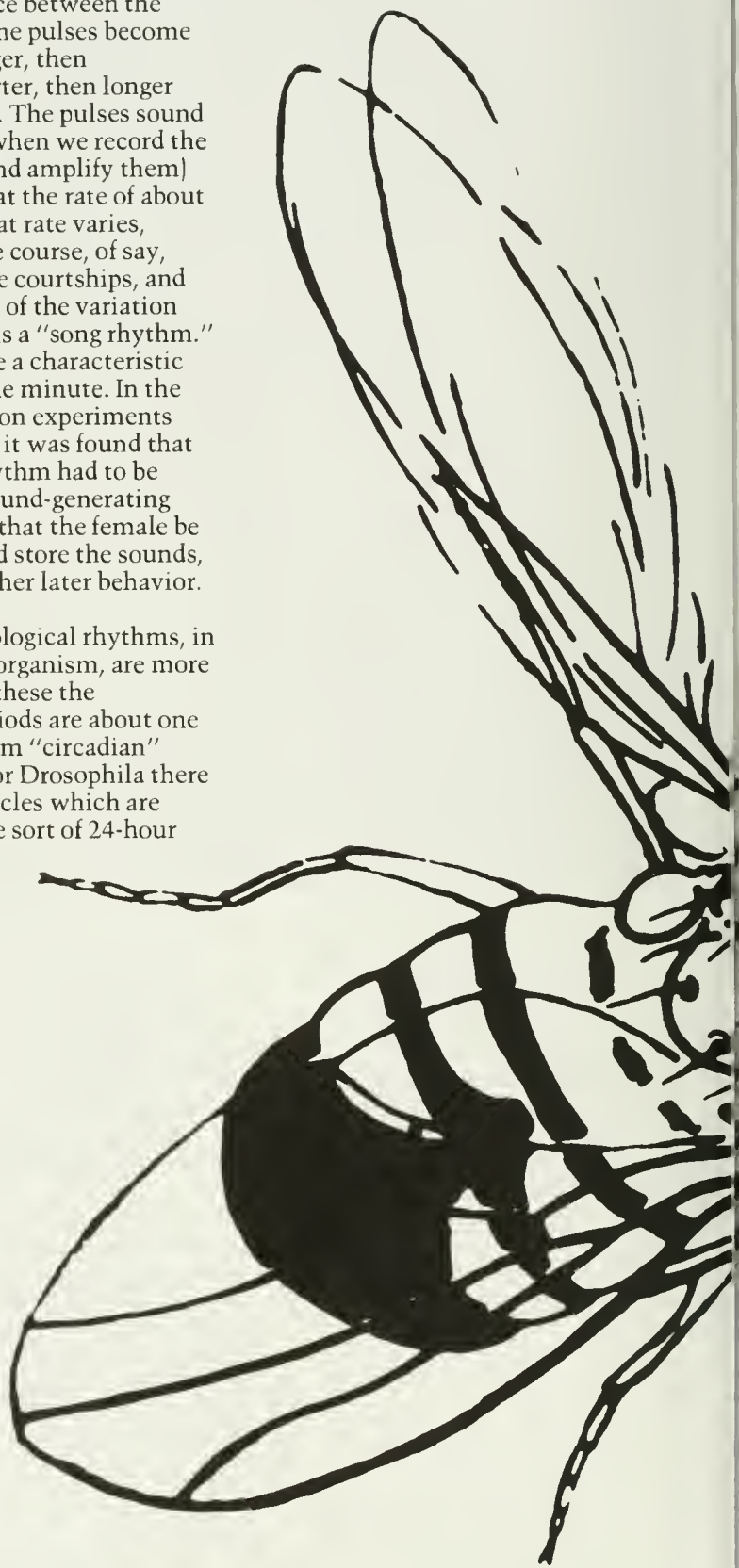
Yet if a male courts, and also mates with, a virgin female (who produces only aphrodisiac odors), then he will subsequently court other virgins with gusto. From the standpoint of the female's response to reproductively important stimuli provided by a male — the most conspicuous (to us) is the courtship song produced by a special type of wing vibrations — we now know that her receptivity to mating attempts can be enhanced by prior experience. If one electronically mimics the male's song to females, they mate more readily afterward.

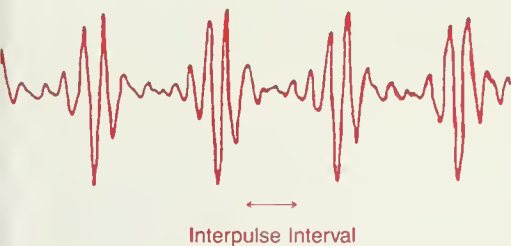
These behavioral aftereffects are interesting from the genetic angle. This is because a collection of learning and memory mutations impinge on the capacity for storage or retrieval of the relevant information, which, in courtship, consists in part of olfactory and auditory cues.

These mutant flies are also defective in some more obviously experience-dependent behaviors, such as the ability to associate a noxious stimulus (electric shock) or a rewarding one (sugar) with a particular odor. The same mutants are defective in conditioned courtship. This further implies that the fly's behavior cannot be viewed as entirely innate and fixed, though it had long been assumed to be this way in the fruit fly.

A key feature of *Drosophila*'s courtship song fluctuates in a strikingly regular manner. The brief moments of silence between the male-produced tone pulses become progressively longer, then progressively shorter, then longer again and so forth. The pulses sound to us like clicks (when we record the wing vibrations and amplify them) and are produced at the rate of about 30 per second. That rate varies, regularly, over the course, of say, three to 10 minute courtships, and the regular nature of the variation leads us to call this a "song rhythm." The rhythms have a characteristic period of about one minute. In the song prestimulation experiments (described above), it was found that this particular rhythm had to be included in the sound-generating machine in order that the female be able to receive and store the sounds, as determined by her later behavior.

Other types of biological rhythms, in practically every organism, are more well-known. For these the characteristic periods are about one day, hence the term "circadian" rhythms. Thus, for *Drosophila* there are sleep/wake cycles which are regulated by some sort of 24-hour





clock. A fly is, roughly speaking, active for 12 hours, then inactive for 12, active again, et cetera. As in many other organisms, these periods are coordinated with day/night cycles, but the rhythm persists in constant darkness, for several additional days after the lights are turned off.

What has this to do with the song rhythm? Remarkable genetic mutations have been produced in *Drosophila*, which change or seemingly abolish the circadian clock. Mutants have been produced which run on a 19-hour clock or a 29-hour clock. Others have been produced in which the cycles are arrhythmic, so that the flies are active or inactive in an arbitrary manner over the course of a given 24-hour time period.

These circadian mutations turn out also to disrupt the long-term song clock in an exactly parallel manner — causing, respectively, 40- or 80-second periodicities, or arrhythmicity (i.e., randomly fluctuating intervals of silence between song clicks).



Therefore, the “clock” mutations define genes which seem to be involved in general timing phenomena. One wonders what biochemical functions could be encoded within such a genetic locus, causing such very different kinds of rhythms to go awry, in parallel, when a given mutation is induced. To begin to look into this, the clock gene has now been isolated molecularly.

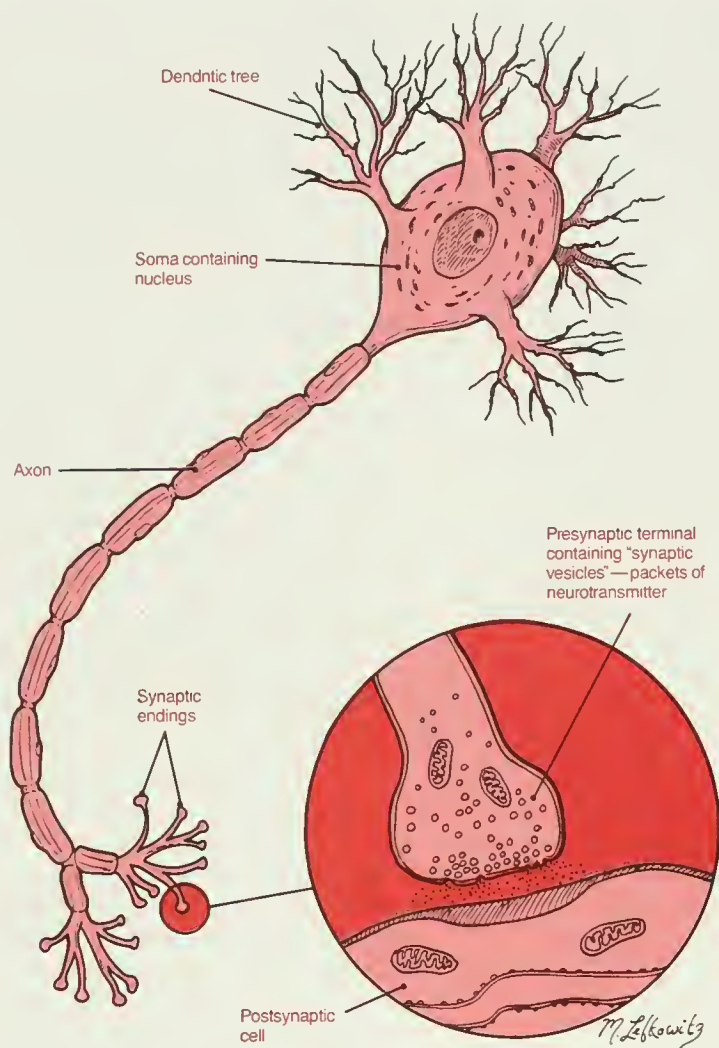
The result is that there is now a powerful molecular inroad to the fly’s biological clocks, of the same general type that has been established for the control of embryonic neural development. The latter studies are further along, but information on the “expression” of the clock gene is being obtained quite rapidly. For example, investigators have begun to localize the expression of this clock gene to portions of *Drosophila*’s central nervous system.

There is, as yet, no clue as to what kind of final gene product (presumably a protein) is encoded within this genetic material, or what portion of the clock gene gives rise to it. But there is a decent chance that this mystery will be cracked, and thus that we will begin to unravel what has seemed to be the staggering complexity of biological rhythms. These examples of neurogenetic analysis of embryology and behavior are allowing inquiries to take place at all levels, ranging from genes to neural ganglia, and finally to the higher behaviors of the fly — which are, these days, difficult to view as simple mundane actions relating to little insects. ■



# Nerve Cells and Ion Channels: Fundamental Units of Behavior

by Irwin B. Levitan

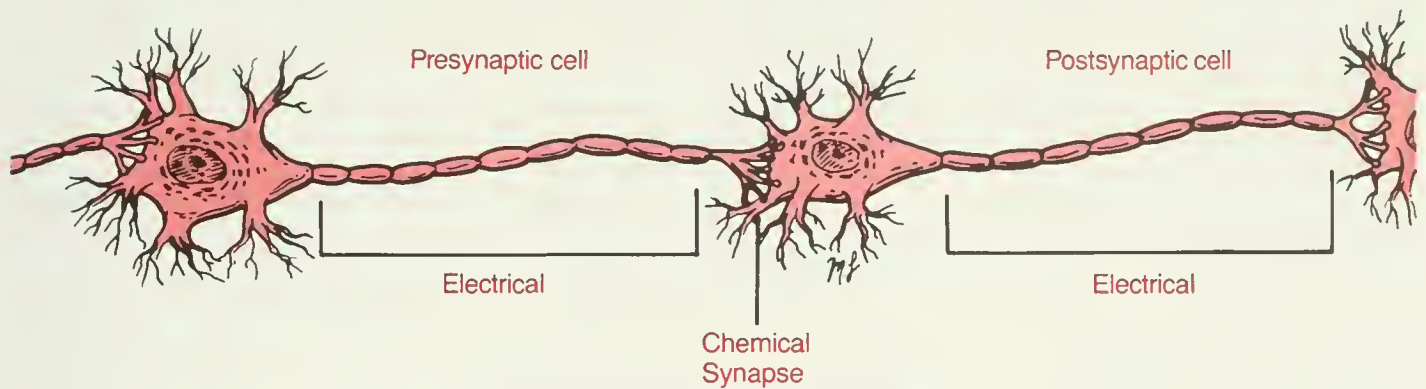


*The human brain is composed of hundreds of billions of cells that control its functions. Analyzing the way information is transferred among the countless networks formed by these cells may reveal how behavior is controlled. Knowledge of information transfer in lower animals has yielded valuable clues about brain function in more complex organisms, including humans.*

Irwin B. Levitan, associate professor of biochemistry, became interested in brain function during his postdoctoral studies at the University of Gothenburg, Sweden and the University of California, San Diego. He spent eight years as a senior group leader at the Friedrich Miescher-Institut in Basel, Switzerland and joined the Brandeis faculty in 1982. His studies make use of the central nervous system of several terrestrial and marine snails. These snails possess giant nerve cells that lend themselves well to the combined biochemical and electrophysiological experiments that are the essence of Professor Levitan's research.

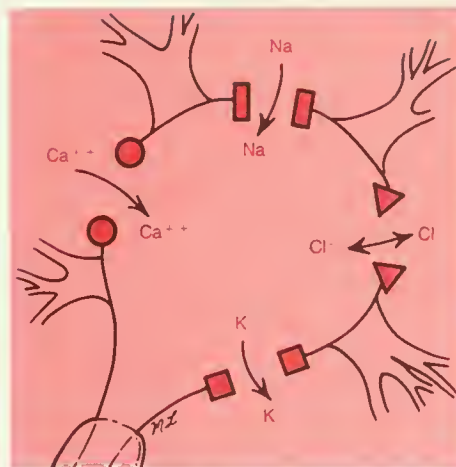
The central question of modern neuroscience, and indeed of the biological sciences in general, is: How does the human brain work? Understanding how the nervous system functions is a challenging and exciting intellectual goal, but more than that, it holds the promise of treatment of debilitating brain disorders which take so severe a toll of individuals, families and society. To understand the brain requires study at all levels of organization, from behaving individuals to single cells and the molecules which govern cellular activity. No one of these levels is inherently more valuable or important than any other; information from all of them is necessary for a complete picture of brain functions. Although this article focuses on studies at the simpler levels of organization, known as cellular and molecular neurobiology, the neuroscience research effort at Brandeis spans the entire range of complexity.

Neurons, or nerve cells, are the fundamental building blocks of the brain. They are, in many ways, similar to other cells in the body; they have the same genes, general organization and biochemical machinery as kidney or liver cells, for example. In other ways, neurons have unique properties which make the brain function in a very different way from the kidney or liver. Among these unique properties are the distinctive, often highly elongated cell shape, and an outer membrane capable of generating and propagating nerve impulses. Most important is a unique structure, the *synapse*, the function of which is to transfer information between individual neurons. It is this intercellular communication, mediated by synapses, which is the essence of nervous system function and which distinguishes the brain from other organs.



There are probably about one hundred billion neurons in the human brain, and each of these neurons may communicate, or synapse, with as many as ten thousand others. This enormous complexity, together with ethical considerations, precludes investigation of the cellular mechanisms underlying behavior in humans. The brains of other mammals are only slightly less complex, and so many investigators have turned to the simpler nervous systems of a variety of lower animals for cellular and molecular studies. Although it could be argued that the study of behavior as it relates to humans cannot be pursued effectively in simple neuronal systems, it has become clear in recent years that there are common principles of brain organization which operate throughout the animal kingdom, and can indeed be profitably studied at the cellular level in lower organisms.

It has been known for many years that most nerve cells have three structurally and functionally distinct regions: the cell body or *soma*, the *axon*, and the *dendrites*. The soma contains the nucleus and most of the biochemical machinery necessary for normal cellular functions. It is this part of the nerve cell which most closely resembles cells in other organs. The axon is a thin tube-like structure extending from the soma,



*Individual ion channels are specific for particular ions. Thus when calcium channels, for example, open,  $\text{Ca}^{++}$  (calcium) will pass through but other ions will not. Because the calcium concentration outside the cell is higher than inside, when the channel is open, calcium will move from the outside to the inside. Since each calcium ion carries a positive charge, the voltage across the cell membrane will change.*

$\text{Ca}^{++}$  = calcium  
 $\text{Na}^{+}$  = sodium  
 $\text{Cl}^{-}$  = chloride  
 $\text{K}^{+}$  = potassium

often for a very long distance (for example from a neuronal soma in the brain to the tip of the big toe some two meters away), and is specialized for the transfer of information faithfully over this long distance. The dendrites are fine extensions from the soma which tend to branch and form a tree-like structure; they are specialized for the receipt of incoming information from other neurons. The synapse is the point of contact between two neurons and is the most highly specialized structure of all. It occurs where the axon terminal of one cell contacts the soma or (most often) the dendrites of another.



How do signals travel along paths provided by nerve cells? Information transfer in the nervous system utilizes a combination of electrical and chemical mechanisms. Signals are transmitted along the axon from the soma by means of electrical impulses. When these impulses reach the tip of the axon, they cause small packets of a chemical transmitter to be released. This transmitter then diffuses across the narrow space separating the two cells and combines with a specific receptor in the second neuron. By mechanisms which are still poorly understood, the chemical signal is reconverted into an electrical signal which can now be transmitted along the axon of the second neuron. This process of synaptic transmission, the transfer of information from one neuron to another by conversion of an electrical signal to a chemical signal and back to an electrical signal again, has been the subject of intense study by neurochemists and neurophysiologists since the beginning of this century, and continues to be studied at Brandeis, both in my laboratory and in that of Professor Eve Marder of the department of biology.

Knowing how signals travel along single nerves or from one cell to the next is only the beginning. Behavior and learning depend on more complex neural networks.

The leech, the lobster and the snail are an unlikely trio contributing to our knowledge of the functioning of the human mind. Yet those animals, with their simple nervous systems, are providing us with clues to the age-old question of how the human brain works. These creatures are capable of learning a variety of simple tasks, often related to feeding or reproductive behavior, or to defense mechanisms. From the point

of view of cellular analysis, the numerical simplicity of their nervous systems, which may contain as few as 10,000 neurons, is most important. These neurons are usually divided into discrete groups called ganglia, which may contain only several tens or hundreds of cells. Many of the neurons in a given ganglion are recognizable as distinct individuals, based on their location in the ganglion, their particular electrical activity, and their pattern of synaptic connectivity with other cells. Thus, it is possible to assign particular behavioral functions to certain cells, and to elucidate a kind of cellular "wiring diagram" for a given behavior. Once the wiring diagram is known it becomes possible to ask how the cellular elements are modified when the behavior is modified, that is, when the animal learns something new. Such investigations of the cellular connection patterns which underlie behavior are being actively pursued in Professor Marder's laboratory.

From these kinds of experiments it is becoming evident that modifications in the functioning of individual synapses really are involved in learning and memory. Investigators have found that changes in behavior are accompanied by changes in transmission across a synapse, so that after learning has taken place, the same electrical signal in the first neuron evokes a different electrical response in the second one. This indicates clearly that some aspect of the chemical component of synaptic transmission has been modified. It has been possible to go yet one step further and to ask whether the sending or the receiving cell is changed, whether the modification is at the *presynaptic* or *postsynaptic* portion of the synapse. For example, it seems possible that postsynaptic receptors may be changed so that they respond in a different way to the same quantity of a chemical transmitter. Alternatively, the machinery which converts the chemical signal back to an electrical

one in the postsynaptic neuron may operate in a different way. Either of these is an example of *postsynaptic* modification which might give rise to a change in synaptic transmission. A third possibility that arises is that the same electrical signal may release a different amount of the chemical transmitter from the first neuron. At least one behavioral change in a marine snail has been shown to be due to a *presynaptic* change of this latter type.

Search for the mechanisms of signal transmission has led us to ever smaller biological structures, some we could only imagine but not measure a few years ago. Recent development of highly sophisticated and sensitive biophysical measuring techniques has allowed the extension of cellular approaches to the molecular level: to the molecules which control neuronal electrical properties. The membranes of nerve cells contain a class of protein molecules known as *ion channels*. These proteins span the membrane and form pores through which ions such as sodium, potassium, calcium and chloride can move between the inside of the cell and the extracellular space. It has been known for some time that ion channels are not simple inert pores in the membrane, but rather are dynamic entities whose function can be regulated. Under some circumstances they are "closed" and do not allow ions to pass, whereas at other times they are "open" and do allow the passage of ions. Since ions are electrically charged, their movement causes a change in the distribution of electrical charges across the cell membrane, and such changes in charge distribution are

responsible for the generation of nerve impulses. Ion channels, in turn, modulate or control the distribution of charges across the membrane. Thus, the way a chemical synaptic transmitter can affect the postsynaptic neuron is by changing the state (open versus closed) of particular ion channels. It can therefore be seen that ion channels are responsible for the regulation of the electrical activity of nerve cells, and hence are of fundamental importance in the regulation of behavior.

Methods which allow one to measure the activity, the opening and closing of single ion channels are now available. This is probably the most sensitive biological measurement in routine laboratory use, since it is the activity of an individual molecule which is being monitored. Such "state-of-the-art" measurements are now normal practice in my laboratory and in those of Professors John Lisman and Christopher Miller at Brandeis. Professor Miller has, in fact, been a pioneer and is a world leader in the development and application of these powerful approaches.

We finally come to a most provocative question. With these techniques it is now possible to ask whether the activity of ion channels is modified when an animal learns something new. The answer turns out to be yes!! An examination of ion channels in neurons known to participate in a particular behavior reveals changes in the activity of some ion channels but not of others when there are changes in behavior. Furthermore these changes in ion channel activity appear to be sufficient to account for the alterations in synaptic activity which underlie the behavior. Modification of the behavior of an

intact organism at the highest level of complexity has thus been related directly to the activity of a particular molecule in particular nerve cells in its brain. This remarkable and startling result brings us closer to an understanding of the behavior of an organism at the most fundamental cellular and molecular levels.

This research relates closely to other work being done at Brandeis including that of Professor Lisman on how the eye responds to light. Lisman and his colleagues have been able to characterize the ion channels which are responsible for converting light into an electrical signal in *photoreceptors*, a special type of neuron in the eye. Workers in my own laboratory have recently discovered that the activity of certain ion channels in nerve cells can be regulated by an enzyme which is also present in all other cells in the body. This enzyme serves different functions in different cells. Thus, in liver cells, it is responsible for the release of sugar when blood sugar levels are low. These findings suggest that there is nothing unique about the molecular mechanisms which regulate ion channel activity, but rather that familiar cellular mechanisms are involved.

The approaches described here involve the reduction of a phenomenon into its constituent components, in the hope of discovering how these individual components work and contribute to the phenomenon. An understanding of these fundamental units is necessary, but is not in itself sufficient, to understand behavior completely. Although elementary aspects of mental processes can be found in the activity of one or a few nerve cells, there are certain complex mental activities which can only be carried out in the complex brains of higher mammals. Perhaps the best examples of this are the abstract thinking and complex language capabilities exhibited by that exquisitely complex and very special organ, the human brain. Reductionist approaches have nevertheless been remarkably

successful in recent years, and have allowed the identification of individual cells, and, in fact, individual molecules whose activity governs certain behaviors. They have provided important clues about how behavior works in normally functioning organisms, and begun to suggest ways in which normal mechanisms might malfunction in certain pathological states. ■



# Language, Memory and the Brain

by Arthur Wingfield and Edgar Zurif

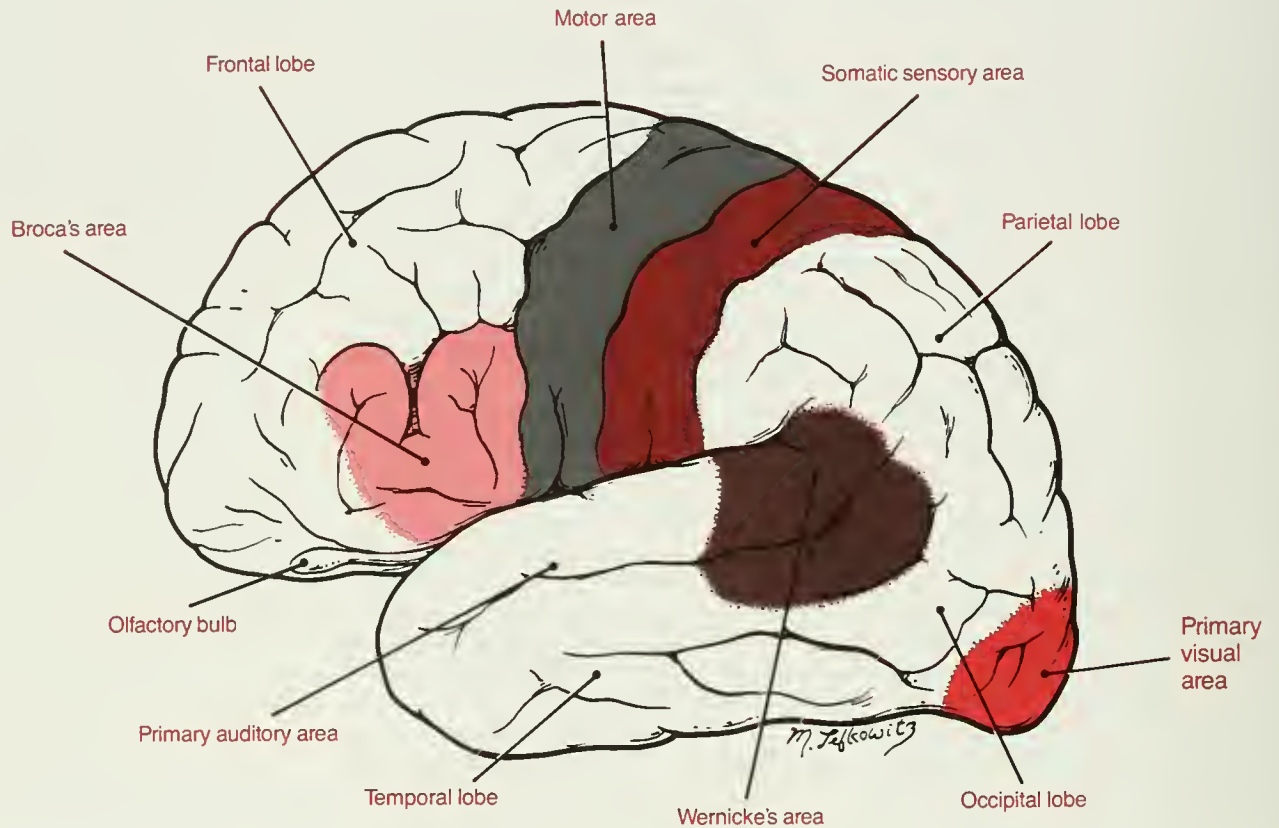


Figure 1: The shaded areas on this side view of the left hemisphere of a human brain show the locations of Broca's and Wernicke's areas, as well as several other important sections of specialization (visual and auditory.)

*Working with brain-impaired patients has led researchers to revise old notions about "centers" of the brain. While searching to comprehend the complexity of the human mind, they have also added to our understanding of the effects of aging on memory.*

Arthur Wingfield, chairman of the psychology department, is the author of two textbooks, *Human Learning and Memory*, and *The Psychology of Human Memory*. He has been a visiting scholar at the University of Copenhagen and the University of Cambridge, and is the recipient of an award from the American Speech and Hearing Association for his research on time-compressed speech. Prior to coming to Brandeis he was a member of the research staff of the Medical Research Council in Britain and a tutor in psychology at Oxford University.

Edgar Zurif, professor of psychology, is also affiliated with the aphasia research unit at the Boston Veterans' Administration Medical Center, the Cognitive Science Center at M.I.T. and the Cognitive Neurosciences Institute at Cornell University Medical School. He is the author of numerous articles on language organization in the brain.

The ability to process language, memory, and thought is the supreme accomplishment of the human brain. Neuropsychology seeks to understand how these functions are performed by analyzing how the brain is organized. But unlike other areas of modern brain science, the search for these distinctly human processes cannot be directly answered through the study of the nonhuman nervous systems. Human cognitive function represents complexity of an order of magnitude that currently defies such simple extrapolations.

The effect of brain damage on language ability, and the effects of normal aging on an individual's memory, are two areas of study that have demonstrated the intriguing complexity of the human mind.

Whether the brain is made up of separate functional units is the basic question addressed by neuropsychology whose beginnings can be traced to two very brief reports written around the end of the 19th century by a French physician (and amateur anthropologist) named Paul Broca. Broca encountered two patients who had suffered injuries to their brains that left them with a virtually complete loss of speech. Although unable to speak, their mental faculties seemed unimpaired in any other way. There was no paralysis of the speech mechanism to account for this loss and their intelligence remained normal, as did their comprehension of other people's speech.

On autopsy it was discovered that both of Broca's patients had injured a relatively circumscribed area in the forward portion of the brain's left hemisphere. This area of the brain became known as "Broca's area," and the form of language disturbance it produced as "Broca's aphasia." (Aphasia is a general term which refers to any language disturbance following brain injury, whether the damage is caused by accident, stroke, or tumor.) This early report was quickly followed by others claiming

quite specific losses of function apparently associated with other specific areas of the brain. Damage to another part of the left brain hemisphere, posterior to Broca's area, was claimed to produce severe difficulties in language comprehension, while the patient's own spoken speech could remain quite fluent (Wernicke's aphasia).

This apparent relationship between two distinct kinds of language failures resulting from damage to two different areas on the brain surface, or cortex, led to the presumption that language, and perhaps other cognitive functions as well, might be represented in a number of anatomically interconnected "centers" in the brain. Because of the nonfluency of speech in patients with Broca's aphasia, the cortical area associated with this aphasia could be considered the center for storing, or at least executing, the rules by which language is coded into articulatory form. In a similar way, the cortical area associated with Wernicke's aphasia could be thought of as the center for the recognition of spoken language. Patients with Wernicke's aphasia also produce many errors in speaking. This would be consistent with the presumed function of Wernicke's area. A patient with a deficit in language comprehension would have as much difficulty monitoring his or her own speech as in comprehending the speech of others.

Improved methods of neuroanatomical investigation, aided by scanning computers and more sophisticated behavioral analyses of normal and impaired function, have expanded greatly on these early observations. We now know that the picture is far more complex than it first appeared. Few today, for example, would attempt to identify a symptom with a presumed cognitive function. The relation between language deficit and damage to a particular cortical area should not be taken to indicate that it is in this area — and this area alone — that language function resides. There are two reasons for this.

The first follows from our developing knowledge of the patterns of neural connectivity involving subcortical, as well as cortical, brain matter. We now recognize that lesion sites such as those occurring in Broca's or Wernicke's areas do not mark "centers" of functions, but instead indicate the crucial links in the complicated neural underpinnings of these specific language operations. Of equal importance, studies in which we are involved have begun to reveal the incompleteness of the earlier characterizations of the functions themselves as thought to be represented by these cortical areas. The thrust of this research has been to specify in greater detail, and with greater care, those neurologically and behaviorally discrete components which comprise the language faculty.

One example of this work has focused precisely on the traditional distinction between speaking and listening as separate activities. Broca's area designated the center for the former, and Wernicke's area the center for the latter. On closer examination we have found that neural organization for language does not merely reflect input-output distinctions. The brain also makes distinctions among more abstract information systems such as phonology (the sound pattern of language), syntax (the generation and control of word ordering), and semantics (the real-world reference of the words we utter). Until recently it was not clear how the deficiencies associated with various aphasia do in fact disrupt these more abstract information systems, systems which are shared in both the perception and production of language.

This view has been strengthened by recent evidence that the earlier held distinctions between the perception and production of speech are in many regards more apparent than real. In our experimental studies it has become increasingly clear that, contrary to earlier formulations, comprehension capacities in Broca's aphasia do not escape entirely unscathed, a fact that can easily go



unnoticed in ordinary neurological examinations. To put it simply, the ability to comprehend speech is "less public," less readily apparent to the observer, than speech production, and thus requires careful experimental analysis for its detection. In the specific case of patients with Broca's aphasia, for example, the ability to use words to refer to objects and activities, and to understand word meanings, can be relatively well preserved, while the ability to produce and understand sentence structures appears diminished.

Other studies of left hemisphere function have also revealed a variety of important domains of neural specialization beyond language. These include functions as disparate as object recognition and certain forms of purposeful movement. It is necessary to emphasize, however, that the left hemisphere is not simply a repository of undifferentiated symbolic capacity: while some patients may show disorders in both language and in object recognition, others may show only one or the other of these disorders. Notwithstanding the ordinary unity of our conscious experience, the left hemisphere of the brain seems to be comprised of special purpose systems — systems that normally interact in an indivisible way, but which can become intriguingly disentangled as a consequence of focal brain damage.

This notion of specialized systems, what one might call "neural modules," is based on data accumulated from analyses of the effects of right brain damage. As recent studies have shown, this hemisphere is far from silent. Rather, it is crucially involved in sustaining such activities as the manipulation of visual space and the perception of slow wave acoustic patterns as, for example, music and the melody pattern of speech.

Clearly these are complicated issues, and our understanding of the functional consequences of neural organization for human cognitive activity is in its infancy. Equally clear is that careful analyses of

something as complex as brain structure and behavior is possible and that advances in our understanding of surprisingly specific functional relationships within the human brain are possible. We have, in short, come a long way since Broca's confident, if overly simple assertion, "*. . . on parle avec l'hémisphère gauche.*"

If this is the case, we are bound to ask whether similar care could not allow us to address other seemingly impenetrable questions. The effects of neurological aging on cognitive function is one such question.

Age, as we know, brings more than wisdom. Along with a maturity of mind and a graying of hair often come complaints of everyday lapses of memory, complaints of an inability to concentrate, to follow rapid dialogue on television or with one's grandchildren, to be able to remember far more vividly the memories of one's early years than of more recent events. Many of us have had personal contact with friends or loved ones afflicted with Alzheimer's disease. But even for the healthy elderly person these difficulties can be a nagging annoyance. What happens to memory as we get older? How do the biological changes that accompany advancing years affect performance?

Answers to these questions are long overdue, and current research into the mechanisms of normal aging takes place within the context of a nation realizing that its elderly represent a valuable, and often unappreciated, national resource. While we may think of ourselves as a young nation with a concentration on youth, some projections suggest that by the year 2000 half of our population will be over the age of 50, and one-third over the age of 65.

As we have looked closely at the everyday memory problems associated with aging we have found more than a few surprises. One notable example came when we tested a group of elderly volunteers who reported to us that they had special problems in remembering recent conversations with family

members, or recalling such everyday things as television weather forecasts.

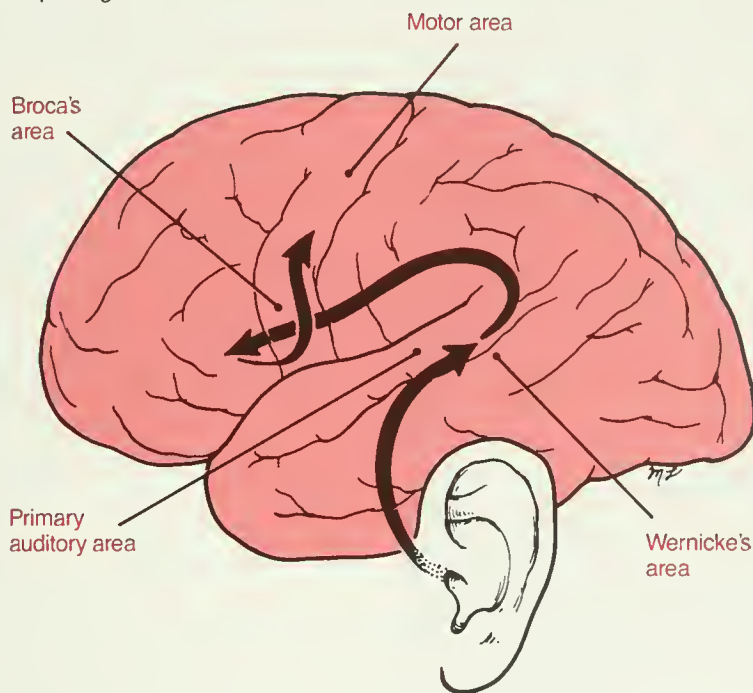
We began by testing their memory for brief conversations spoken slowly and clearly, with plenty of time to "digest" what had been heard. Their memory performance was excellent by comparison with a control group of young volunteers who had offered to help us in our research. Where was the source of the problems they had reported?

Part of the answer became clear when we tested memory and comprehension for very rapid speech, something which can be done through artificially accelerated or "time compressed" speech on a small computer. To be sure, as the rate of speech increases individuals of all ages show loss of comprehension. With the elderly, however, the rate of loss was much steeper; in some cases representing a five-fold increase.

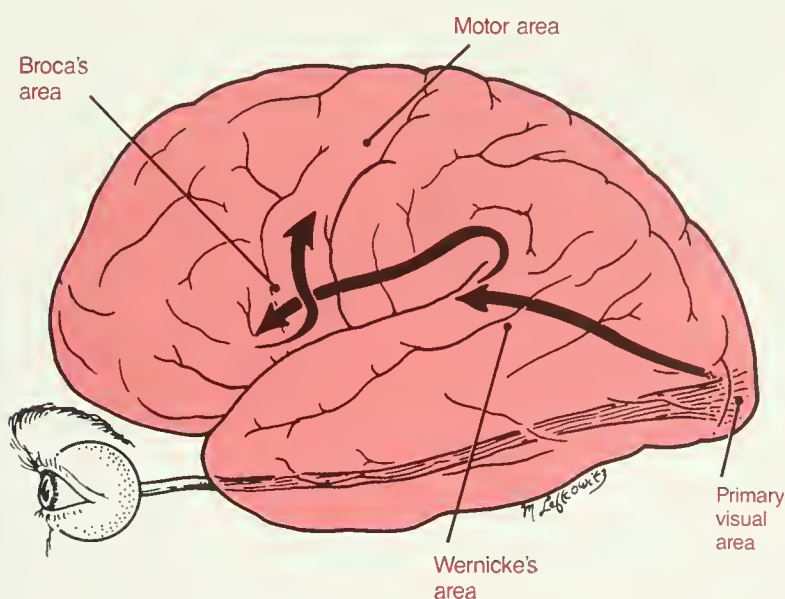
To understand the implications of this finding, it is important to know that speech, even when it is artificially presented as fast as twice the usual rates for conversational speech (ordinarily about 180 words per minute) can still be understood by young and elderly listeners alike, provided that the material is fairly familiar or not too complex. Further, when comprehension does break down, it turns out to be due almost entirely to the loss of the time we ordinarily have available to process what we have heard. When we presented speech at very fast rates, but restored the lost time at certain critical points in the utterances, intelligibility could return almost to normal levels. This is true of the young and, as it turns out, it is even more true of the elderly.

One way to understand this is to say that the elderly require more time to "process" speech than do the young. In many cases the apparent "memory" problem of the elderly may be as much an acquisition problem as one of retention, *per se*. The slowing of responses that one notices in manual activity seems to be paralleled to some extent in rates

### Repeating



### Speaking aloud



*Figure 2 top: The arrows trace the pathways information would follow in repeating a spoken word. The information would travel from the primary auditory receiving area to Wernicke's area, as the word is understood. Signals would then be sent to Broca's area for organization of the spoken response, and then to the lower area of the motor cortex to*

*initiate the actual movements of the speech mechanism.*

*Bottom: Reading a written word aloud required primary analysis of the visual information in the primary visual area, then to Wernicke's section. In order to speak, the signals would be sent to Broca's area and finally to the motor section.*

of integrating information as it is heard or read. There is another side to this coin, however, and that is that when our elderly volunteers were given time to concentrate on what they had heard, time to "digest" the information, their performance not only improved dramatically, but often to a point virtually on a par with our young adults.

One other feature that emerges as one tests a variety of elderly volunteers is that aging is by no means a unitary process; that individuals may be older or younger than their chronological years might suggest. Just as some individuals may seem older or younger than their years in grayness of hair or slowness of movement, so mentally there are great differences. Indeed, we have tested subjects in their 70s whose performance compares quite favorably with our Brandeis undergraduates when they are carefully tested for memory ability.

Carefully plotting the areas of behavioral change that accompany normal aging, and being able to distinguish between consequences and causes, is as important for the early detection of cognitive difficulties as it is for our eventual understanding of the neurobiology of aging. Part of this process, the specification of those functions that remain relatively intact and those most sensitive to the aging process, can also offer ways to educate the old (and the young with whom they interact) in more effective strategies to enhance their communication potential; to take advantage of those functions that remain more intact, and hence to optimize their overall levels of performance.

In short, though much of the work in modern neuropsychology has a theoretical orientation — seeking to advance our knowledge of how human cognitive capacities are organized in the brain — the consequences of this effort are distinctly practical. ■



# Implications of Space Flight for the Study of Mind

by James R. Lackner



*Despite immense advances in knowledge, two major mysteries still remain: what is the universe and what is the human mind. While trying to solve the first puzzle, scientists are adding knowledge about the second. What has the placing of human beings in outer space taught us about their functioning on Earth?*

*Above photo: Professor Lackner exposed to "an unusual force environment."*

James R. Lackner, professor of psychology, is director of the Ashton Graybiel Spatial Orientation Laboratory on the Brandeis campus. He is executive secretary of the Space Adaptation Syndrome Steering Committee of NASA's Johnson Space Center, a member of the Sensory Motor Committee of the Space Science Board of the National Academy of Science and of the Astronaut Longitudinal Health Committee. He is also on the advisory board of the Space Biomedical Research Institute of the Johnson Space Center. Lackner's honors include membership in the Bárány Society and the International Academy of Astronautics.

Few people think that space flight is providing us with information about the nature of human mental organization. Yet, as the Russian and American space programs progress, much is being learned about the ways in which our bodies adapt to the force of gravity. In turn, these adaptations provide insights into many aspects of mental performance that we take for granted. It is only when we are exposed to unusual force environments, we realize that much that we take for granted — such as the apparent stability of the ground, and the apparent absence of great force changes on the soles of our feet as we shift stance back and forth from one foot to two — are actually the result of complicated sensory-motor computations that our nervous system is performing.

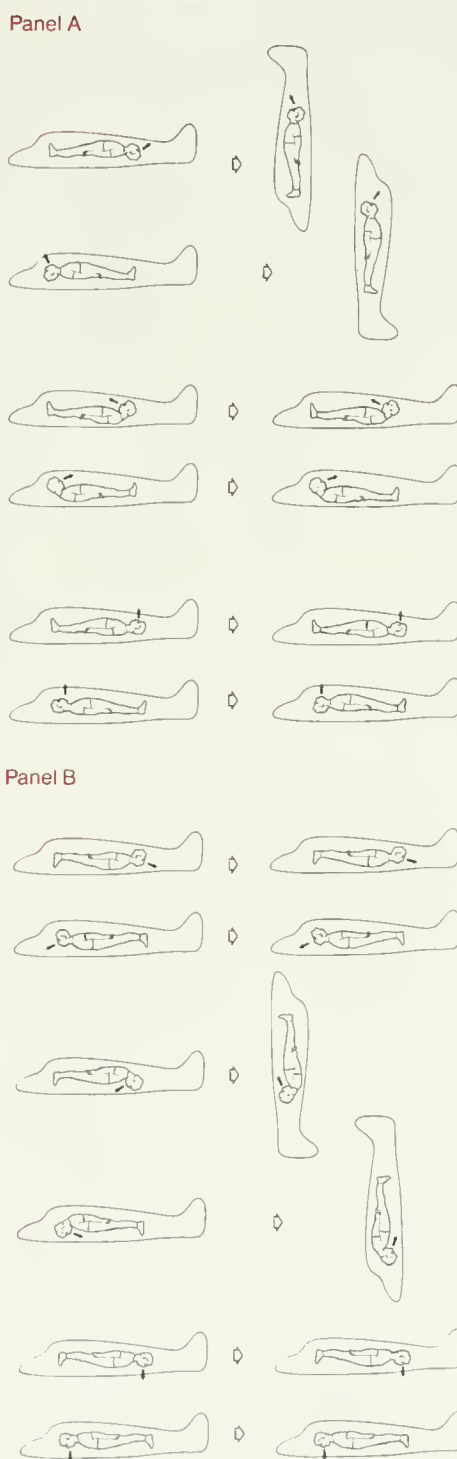
The first clue about these adaptations came after the first orbital flights. Titov, during the second manned Russian space flight in 1961, experienced disorientation and nausea. During much of the flight he felt as if he were upside down. Later, astronauts and cosmonauts felt symptoms characteristic of motion sickness including nausea and vomiting and the term "space motion sickness" was coined. As more is learned about human behavior in weightlessness, it is apparent that space motion sickness represents only one aspect of the way man has to adapt to the "free fall" conditions of orbital flight. To understand this adaptation and its significance for the study of mind, it is necessary to consider the influence of gravity on our life on Earth.

On Earth, the acceleration of gravity provides a continuing stimulation of receptors of our inner ear which are sensitive to linear acceleration. Also, gravity by "pulling" our body against the surface of the Earth causes asymmetric stimulation of pressure-sensitive receptors in our skin and of receptors in our muscles, joints, and viscera. It is these that make us aware of the relative configuration of our arms, legs, head, and torso. "Down" is the direction our bodies are pulled by gravity and

also corresponds to where the major tactile stimulation of our body surface occurs. When we sleep on our back we are orientating our body so that the maximum pressure is on the back.

In the "microgravity" conditions of space flight, the sensations associated with existence in a terrestrial environment are dramatically altered. Sense impressions related to the force of gravity are no longer present. Some astronauts find this very unsettling. For example, they can only fall asleep if they wedge their bodies into restraints similar to those associated with their favorite sleeping positions on Earth. Other astronauts have found that without a "tactile down" they are initially nauseated, especially when they move their heads. Over time most astronauts learn that there are ways they can position their body within the spacecraft so that they again have a firm impression of "up" and "down."

One aspect of our research program at Brandeis' Ashton Graybiel Spatial Orientation Laboratory is to determine what factors influence perceived body orientation and movement in weightless environments. We are trying to find out, for example, how an astronaut gains a feeling of up and down when he is free floating and touching nothing. We are also concerned with determining why astronauts become sick during space flight. We have a great range of instruments for studying these problems including a large rotating room, rotating chairs and drums, devices for tilting people, and instruments for recording body movements and orientation. Every eight weeks we spend one week at the Johnson Space Center in Houston, conducting experiments in a specially equipped Boeing KC-135 aircraft, called Weightless Wonder IV. This airplane is flown in a parabolic path to create forty 20-30 second periods of weightlessness. During these periods, we conduct our experiments. The flight path involves alternating periods of free fall and twice Earth-gravity force levels.



*Figure 1a and 1b: Figures on the left illustrate the subject's true orientation in relation to the aircraft. Entries on the right indicate the subject's experienced orientation and that of the aircraft.*

We have found several curious things in our parabolic flight experiments. For example, when astronauts are free floating, if they close their eyes, they may lose all sense of their spatial position within the aircraft and remain aware only of the relative configuration of their arms, legs and torso. They know the spatial layout of the aircraft but have no sense of their true position within it. By contrast, when their eyes are open depending on the direction of their gaze in relation to the internal verticals and horizontals of the aircraft, the astronauts may feel right-side up in a right-side up aircraft or upside down in an upside down aircraft. This relationship is illustrated in Figure 1. Think how disruptive it would be for us on Earth if our senses of being upright or upside down depended only on which direction we were looking!

Another curious fact is that even though in orbital flight astronauts are in free fall, they do not feel as if they are falling. We have found the same thing in our parabolic flight experiments — in order to have a sense of falling, much more than loss of pressure cues on the body surface is necessary. Other factors, such as visual cues, airflow cues, and cognitive information are involved. There is also evidence that in the absence of gravity tugging on our limbs, we quickly begin to experience less vividly the position of our limbs when we are not tensing the muscles. One astronaut reported being startled on awakening in the dark to see a luminous object floating close to his face. Only when he tried to push it away did he realize that he was seeing the dial of the watch on his wrist.

In orbital flight, the body is weightless and consequently all aspects of movement control are affected. On Earth, for example, forwards and backwards pitching movements of the head place varying demands on the neck muscles because the head changes position with respect to the direction of the force of gravity. As the head is tilted forward, for example, the muscles at the back of the neck have to work



harder to support the head. By contrast, when the body is weightless, these same movements in pitch are associated with very different patterns of muscular innervation and sensory feedback. In our parabolic flight experiments, we have found that making head movements in pitch readily induces motion sickness, while stabilizing the head tends to prevent sickness. This implies that space motion sickness arises in part because motor control and sensory feedback associated with body movements are no longer normal.

Such a conclusion suggests that control of our body movements on Earth is actively adjusted and tuned in relation to the background force of gravity. In one way, this is an obvious conclusion, how could it be otherwise, but in another way it has some interesting implications for the nature of mental and perceptual organization. For example, after prolonged exposure to microgravity, when an astronaut again attempts to move about on Earth, he feels that the ground moves under his feet as he walks. We have found that the same effect occurs in the high force phases of parabolic flight. If an individual lowers his body by doing a deep knee bend during exposure to a 2G force level, he will feel as if he has lowered his body too rapidly and will feel the airplane move upward under his feet. As he feels the plane move upward he actually sees it move upward, as well. This is illustrated in Figure 2.

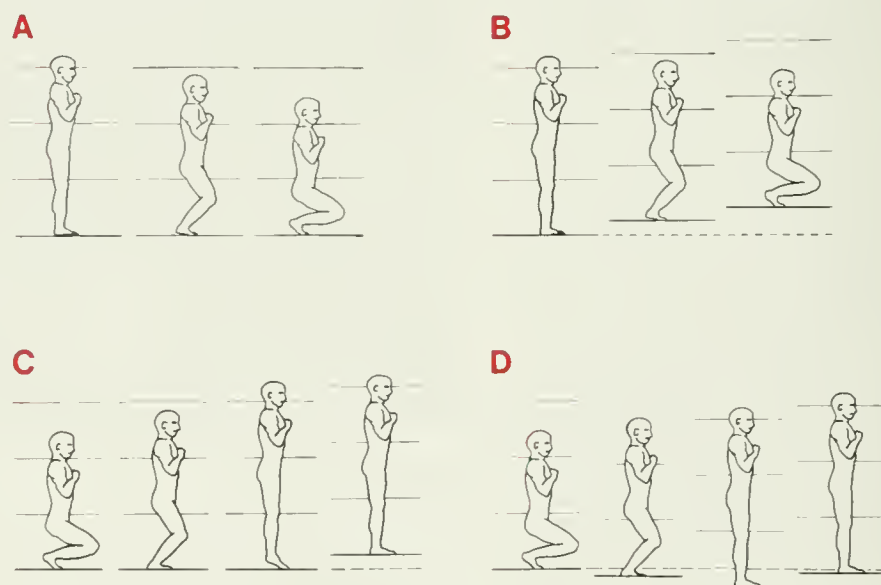
This illusion indicates that normal motor control is calibrated to the 1G level of gravity and that departures from this pull of gravity affect how we perceive our voluntary movements. The illusions result from mismatches between the actual movements and the "expected" movements of the body. After an astronaut is in orbital flight for a prolonged period, his sensory motor control mechanisms recalibrate to his new force background. When he returns to the 1G acceleration of Earth, he is like an individual being exposed to 2G in parabolic flight maneuvers.

Such observations have important consequences for our notions of what constitutes will or volition. Psychologists and philosophers often think that our sense of will or volition in making a voluntary movement arises from monitoring the neural commands issued to the musculature. Our findings with movements executed in unusual force backgrounds show that the situation is actually much more complex. If the sensory feedback accompanying a particular movement is inappropriate, an individual will misperceive his motions. This means that movement control on Earth involves both motor and sensory elements and internal representations of the body's dynamics in a 1G acceleration field.

We have also studied related phenomena that raise questions about how we perceive our body

weight under terrestrial conditions. On Earth when we are standing upright we experience a particular weight of our body and pressure on the soles of our feet. If we shift stance to balance on a single foot, we experience the same apparent body weight but little or no pressure change on the sole of the stance foot. The failure to recognize the great increase in force on the stance foot is actually an illusion because it has, in fact, increased two-fold. This is illustrated in Figure 3.

Moreover, when we run, the contact on the soles of our feet varies from 0 to twice our body weight. Nevertheless, we experience little change, if any, in body weight and in the contact forces on our feet. This means that our central nervous system must continually monitor the relationship between our body movements and the changes in



*Figure 2: Panel A illustrates the actual motion of the subject's body as he does a deep-knee bend during exposure to a 2g acceleration level; viewed left to right the subject is lowering his body, right to left raising it. Panel B shows what the subject experiences his body and the aircraft (depicted by the horizontal lines) to be doing as he lowers his body. It feels as if he has moved downwards too rapidly and that the aircraft has risen up under his feet. Panels C and D illustrate the two forms of illusory postural and visual*

*motion that subjects experience when raising their body from the squatting position. In both cases, it feels as if great effort is involved in raising the body and that it rises too slowly. In C, it feels as if the body has risen too far and left the deck momentarily, the aircraft is then felt as rising upward and making strong contact with the feet. In D, it feels as if the strenuous effort of straightening the legs has pushed the aircraft downward and that when the legs are straight the plane then bounces back up.*

surface contact forces contingent on those movements. So far as conscious awareness goes, force fluctuations that are due to locomotory movements of the body are virtually ignored. Put differently, one aspect of our mental organization under normal conditions on Earth is that we feel virtually weightless when moving about and grossly underestimate the true magnitude of the forces acting on our body. As might be expected, astronauts for some period after return to Earth experience their body as being much heavier than normal and all of their movements as requiring great effort.

The force of gravity has other important influences on our life on Earth. Gravity not only “pulls” our body toward the surface of the Earth but also affects the fluids in our body. If we are standing, gravity tends to pull our blood and lymph fluids towards our feet. In the “zero gravity” conditions of space flight, there is no hydrostatic pressure in the circulatory system and body fluids redistribute. That is why astronauts get puffy faces soon after entry into weightlessness and the so-called “bird legs of space.” Approximately two liters of blood is lost from the circulation of the legs and shifted headward within minutes after entry into orbital flight. Astronauts also become several inches taller without the force of gravity compressing their spines. Being weightless has other consequences for the body as well. Bone requires mechanical stimulation to maintain proper calcium metabolism. This stimulation is normally provided by body contact with surfaces in the environment. In space flight such stimulation is largely absent and significant contact forces are only generated when astronauts “push-off” from the sides of their spacecraft to move about. Astronauts soon begin to lose calcium because of the inadequate mechanical stimulation of their bones.

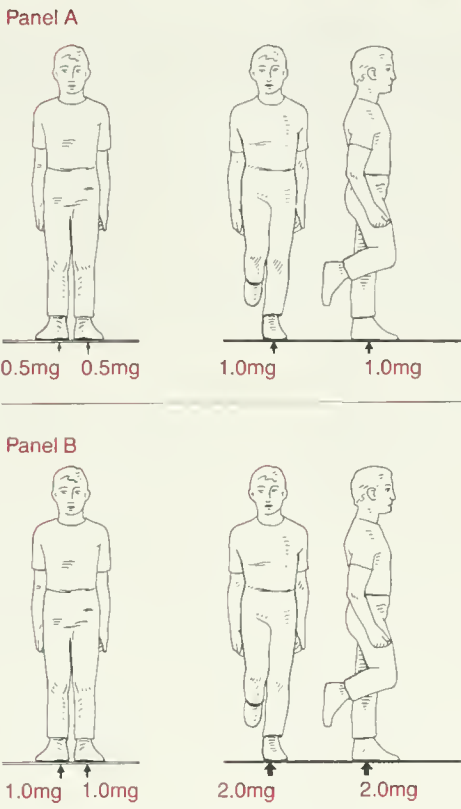


Figure 3: Panel A shows the contact forces of support acting on the feet of a subject standing on Earth. Panel B shows the forces on the subject's feet when he is exposed to twice Earth-gravity acceleration levels in parabolic flight. In the absence of a support substrate the subject would be accelerated downwards.

As can be readily imagined, a variety of cardiovascular changes also occur in free fall because of the absence of hydrostatic pressure in the circulatory system. In fact, the heart becomes smaller because it has less work to perform. Such changes pose significant obstacles to prolonged space flight and attempts are being made to counter them with inflight preventive procedures.

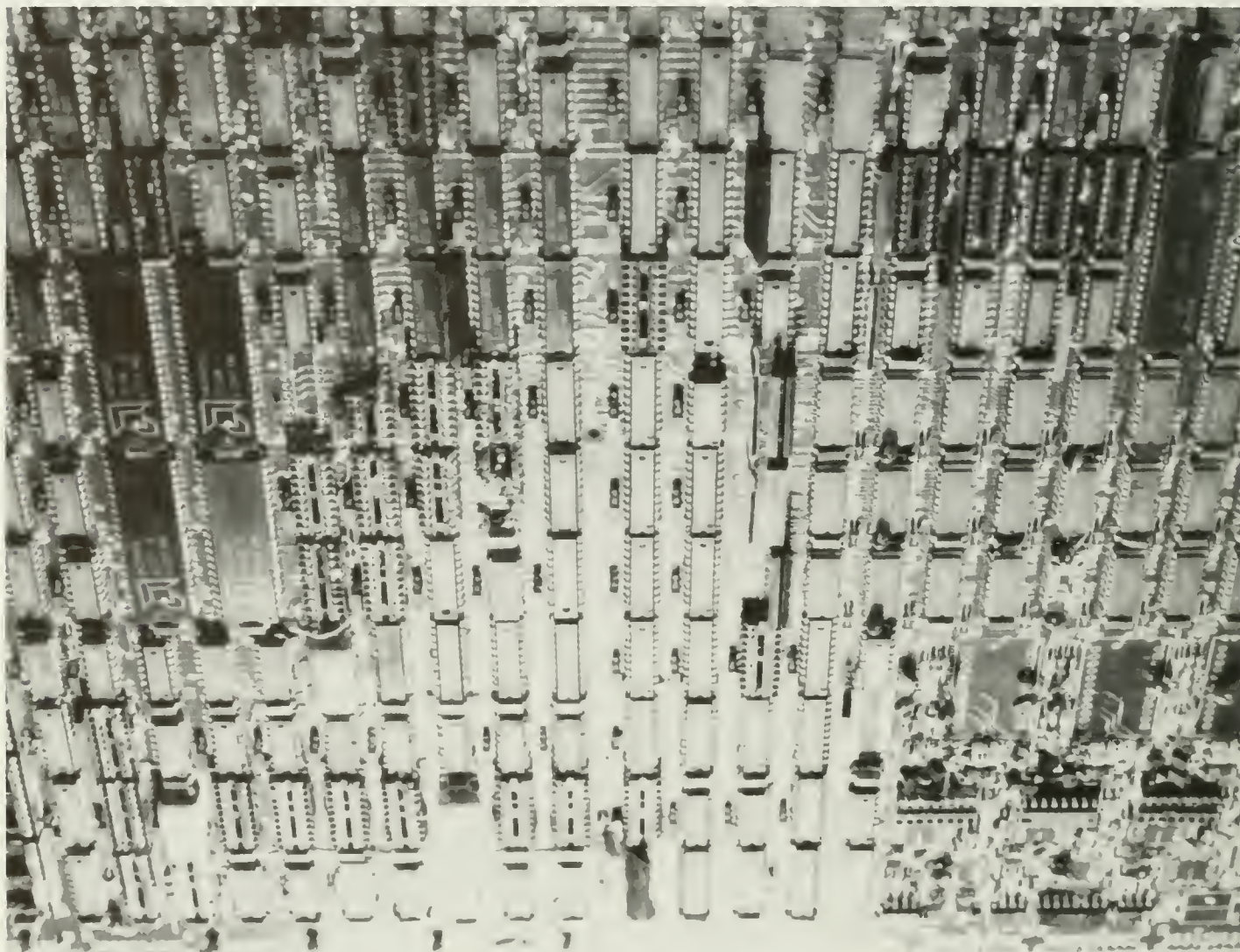
Recently, another consequence of prolonged exposure to orbital flight has been identified. Its discoverer, Ashton Graybiel calls it the “sopite syndrome,” after the Latin word *sopor*, for sleep. Initially, the individual feels body fatigue that persists even after a good night's sleep. As days pass the fatigue becomes more pronounced and persistent; later, general discontent, inattention, and irritability develop. The sopite syndrome represents one aspect of the space adaptation syndrome that persists after overt features of space motion sickness such as nausea and vomiting have abated. It represents a potential impediment to long term space missions and its origin remains uncertain.

One unexpected consequence of our work on human sensory-motor control and orientation in weightless and in high force conditions is the insight it is providing into the nature of mental organization. As we study orientation in these unusual force situations we become aware of the way control of our body movement is dynamically calibrated in relation to the gravitational force of Earth. The accurate perception of our body movements which we normally take for granted during locomotion, results from highly complex, nonconscious mental computations. We only became aware of these computations when the normal relationships among our intended movements and their consequences are modified. Then, just as linguists have shown with language, what seems to be natural, obvious and commonplace turns out to be the consequence of incredibly complex mental processes. ■



# Artificial Intelligence: Obstacles and Opportunities

by David Waltz



*Artificial intelligence is technology's effort to duplicate the workings of the human mind. What assumptions about the brain are used to devise computer models? Can technology duplicate human performance?*

David Waltz, professor of computer science, spent 11 years at the University of Illinois where he led a team that built a system that allows a user to query a data base in natural language (English). He joined the Brandeis faculty this year. His recent research involves developing programs that can process complex forms of language, and computer systems that can learn new concepts. He also holds a part-time appointment as senior scientist at Thinking Machines Corporation, which is constructing a large computer containing 64,000 separate processors.

Although estimates of the computer capacity of the human brain vary, it seems likely that within 10 years, any laboratory with \$2 million or so to spend, will be able to afford a computer that has roughly brain-like computing power.

Internally such machines will resemble the brain. They will be composed of a million or more small neuron-like processors, densely interconnected by wires, much as the brain's neurons are connected to each other via dendritic trees.

The software in these machines will probably be "programmed" using methods that owe more to current educational practice (showing examples, rote learning, etc.,) than to current programming methodology (step-by-step construction of programs in some language such as Basic or FORTRAN). While these machines will mimic some of the brain's functions, barring some miraculous breakthrough, they will not be able to match human performance on general problems.

Over the last 30 years, the field of Artificial Intelligence (AI) has acquired a healthy respect for the subtlety and effectiveness of the human brain. Despite immense progress, artificial intelligence has had only modest success in specialized domains, and so far has failed to duplicate by more than a fraction the overall function of a human brain.

Only in some specific areas, such as vision and speech perception, where we have had access to neurophysiology, has Artificial Intelligence been able to shed light on the detailed functioning of the brain, but the work of the last couple

of decades has also brought us negative knowledge since we have learned quite a lot about what will *not* work. Most of the naive ideas about the limitless possibilities of artificial intelligence have been shown to be inadequate or severely limited.

As current hardware technology is moving toward building brain-like computers that must be taught rather than programmed, some questions to ask are: Why is that being done? Why won't that sophisticated technology with far greater computing power be able to match human performance? What will such machines be able to do, and the inevitable question: what would their likely consequences be for society?

One might suppose that in order to exhibit intelligence, machines will have to resemble the structure of the brain. However, the *real* reason for designing brain-like machines is that we are being forced to do so in the continuing quest for greater computing speed.

To understand this new direction more clearly, one first has to understand something about today's technology. Virtually all current computers are variations on the simple, single-processor "von-Neumann-type" that has been around for nearly 40 years. They are named for John von Neumann, a Princeton mathematician, who is generally given credit for the basic design shared by almost all the world's computers. All these machines are "stored program" computers: they fetch program instructions from memory, and operate sequentially on memory data (one program instruction at a time). They correspond to logical models of intelligence that have pervaded western philosophy from the time of the ancient Greeks, in which rationality and step-by-step reasoning are of paramount importance.

The AI version of this philosophical model is called "heuristic search." This model assumes that a computer system can generate solutions to a given problem, and can then recognize when it has produced a solution. "Heuristics," or rules-of-thumb, are used to try first the paths toward solutions that are most promising, without completely solving the problem. Thus, for example, it is a good heuristic plan when contemplating a trip to estimate the distance, and discard walking as a solution if the distance is greater than 10 miles. Similarly, another heuristic plan would be to discard flying in a commercial aircraft for trips of one mile or less. Heuristics may not always be valid: if the one mile trip is from one rim of the Grand Canyon to the other, then flying might be a reasonable solution.

Most current "expert systems" (used to perform medical diagnosis, to analyze chemical compounds from mass spectrogram data, to help decide where to drill for oil, and design customized computer installations) are based on the idea of heuristic search, a model of human logic.

But some problems, for example "common sense" reasoning about which goals among many to pursue, or the retrieval of memory items that are "relevant" to a current situation, have proved resistant to heuristic methods programmed on today's von-Neumann type computers. In general, any process that involves the simultaneous weighing of alternatives or the use of "intuition" is likely to be much better modeled on the new generation of parallel computers. These computers function in a way that has greater similarity to the brain since processing is distributed among cooperating processors. The brain divides its functioning among millions of neurons.



In addition to being awkward for certain kinds of processing, current computers also have far less raw computing capability than the human brain. How much less? First we need a way to compare brains and machines. One neutral measure is "compute power," calibrated in bits (smallest unit of information) per second. "Compute power" represents the maximum rate at which a computer, or brain, can change its contents. Today's biggest computers have a computing power of 10 billion bits per second, a number achieved by having a single, very fast processor. The brain, by contrast, gets its power by having a vast number of slow processors. It is estimated that there are between 10 billion and 1,000 billion neurons in the human brain, each of which can "fire" only a few times a second. Still, the net result is an estimated compute power of 10,000 billion bits per second, 1,000 times faster than the fastest current computers. (By comparison, a \$90,000 Symbolics computer, of the sort Brandeis recently acquired, has a computer power of 100 million bits per second, about the same as a bee, but 100 times the power of an IBM PC, and 1,000 times the power of a garden slug).

How could we make a computer 1,000 times faster? The speed increases over the last 40 years have been primarily the results of miniaturization and designing of faster components. Today's computers are limited in their speed by the length of time it takes for electrical signals to travel between components. By putting more components on a single miniature chip, we can make computers faster, because the components are placed much closer together. However, we

are reaching the limits of miniaturization for known technologies, and cannot reasonably expect to shrink chips more than a factor of three or four over the next decade. Another system to speed up computers is to make faster components. Transistors could be made somewhat faster, but again, even when using cryogenic (extremely low temperature) circuits, we cannot expect to gain significant speed.

The solution to this problem is similar to the brain's solution: "massive parallelism." The idea is to divide each task among a very large number of cooperating processors, all operating at the same time, and each solving one small piece of the overall task. This solution is analogous to the methods endorsed in the adage "many hands make light work."

Currently a number of universities — including MIT, NYU, Columbia, Illinois, and Texas — and several companies — including Thinking Machines Corporation of Cambridge, and General Electric — are involved in the development of massively parallel computers, containing as many as one million small fast processors, which will yield about one tenth the power of a human brain. Other universities, including Brandeis, anticipating the advent of such computers, have turned a substantial portion of their effort toward the study of algorithms (formal specification of procedure) for parallel computers.

These large parallel machines are likely to be expensive at first (an estimated \$10 million in 1987). However, they are likely to decrease in cost if they follow the pattern of current computer hardware which has fallen steadily over 35 years by a factor of 10 every five years. At this rate, within 10 years such a machine would cost only about \$200,000. Thus, in 1994 a cluster of 10 machines could match the computing power of a human brain for about \$2 million.

Why is teaching rather than programming likely to be used for such machines? Consider the problem we would encounter trying to program a computer to understand English. An English understanding program must have a "lexicon," a data base of words and their meanings. To produce such a lexicon by conventional software engineering methods we should use the ideal programming team of five people (it is known empirically that the total amount of program code produced by a team actually goes down as the team size increases beyond five people). We would need at a minimum 1,000,000 word and phrase senses, probably a low estimate to do a reasonable job on English. If it takes one team member five minutes to encode a word sense (also a low estimate), and if each team member works steadily at the rate of 20 hours per week, it would require 17 years to encode the information for our lexicon! And all this further assumes that there is never a need to go back and revise earlier work — a highly unrealistic assumption. Many other tasks, for example, building an expert medical diagnostician, each require a comparable amount of effort. The task is gargantuan.

The most promising approach is to build, by traditional programming methods, a starting system, which is then capable of adding to its own abilities by reading or browsing through data bases of "experiences." In an English understanding program, the starting system would have to include at least detailed definitions for the 5,000-10,000 most frequently used English words, along with programs for organizing and adding to its own lexicon. Such a program might "learn" a large lexicon, by going systematically through a dictionary, aided by a thesaurus and by a corpus of sentences illustrating the uses of each unknown dictionary word.

For tasks such as medical diagnosis, a computer system could be built to a certain level of competence and then could learn from data bases of medical records, medical journal articles, and/or dialogues with physicians.

It is difficult to say if such methods could succeed, but what is certain is that traditional programming methods won't work for these Artificial Intelligence tasks. Some of my current research at Brandeis, along with graduate students, involves experiments in just this sort of machine learning that requires teaching an already fairly smart robot to perform new tasks by verbal instruction.

Why am I certain that computers won't match human performance in 10 years, even though computers may substantially exceed the computing power of a human brain? Even a system with learning abilities won't be able to absorb an area quickly, any more than a human can learn instantaneously. There are fundamental limits on how fast any person or computer (serial or parallel) can complete various computing tasks (such as ordering a group of objects, or locating an item with particular characteristics within a large data base). There are also limits on how rapidly items may be read by a machine. Some abilities of humans, such as perceptual abilities, are largely innate, and thus not learnable. At least one-fourth of the human brain is devoted to visual perception. Hand programming a system for human quality visual perception is almost certainly too difficult a task to be accomplished in 10 years. Without perception, a system would be fundamentally deficient in understanding certain concepts, such as words describing shape, or visually-oriented metaphors.

In addition, not all problems can be solved faster by a parallel computer, just as not all human tasks can be more rapid if done by a team than by an individual. For example, constructing a building is much faster when using a team, but a team could not appreciably accelerate the writing of a novel. Finally, some aspects of our human understanding are based on common human experiences while others are individual and idiosyncratic, such as emotional reactions to events and situations and the feelings of being in turn an infant, child, adolescent, and adult. While living, each person develops his or her personal history and viewpoint.

Computers can not really be given these experiences, although some programs are already quite good at judging the emotional reactions of characters in stories they read. Computers will almost certainly lack many aspects of "common sense." On the other hand, many computers easily outperform humans in certain tasks, such as dividing large numbers or remembering large amounts of data, so the powerful computers of 10 years hence will surely outperform people in some areas.

Almost certainly, speech understanding systems will be developed, leading to the gradual disappearance of keyboards as the only medium for interaction with machines, and opening possibilities for much greater use of voice directed intelligent machines in cars, planes, the home and office. Expert computers will become available for a wide variety of tasks. Computer vision will improve, opening the way for office and household robots, a much wider variety of industrial robots, and some military robots, such as intelligent autonomous battlefield vehicles and aircraft.

As years go by and technology becomes increasingly sophisticated,

it will appear that man has produced a machine in his own image. But that will not be so. Computers are, and will likely remain for a long time, fundamentally unlike humans in their mix of abilities and deficiencies, and thus they will not fully match human performance, especially in tasks requiring common sense judgment. It is hard to be certain when, if ever, computers will overcome these barriers.

However, even though machines will not match *all* human abilities, they are certain to outstrip humans in a great variety of tasks, much as calculators now outstrip humans in arithmetic calculations. For example, it seems quite likely that virtually all production of goods could be automated within 50 years. The implications of this for society are enormous, so much so that there will be a need for legislative solutions to the societal problems that are likely to arise in the near term, and a social revolution in the long term. ■



# Annual State of the University Report

by President Evelyn E. Handler



*The following is an abridged version of the report presented by President Handler at the October meeting of the Board of Trustees.*

The next several years will be of particular importance to Brandeis as we chart directions that will determine the course of the University in the decade ahead. The University must make some critical decisions that will affect the nature of the academic program at both the undergraduate and graduate levels, the long-term financial health of the institution, and its place in both the higher education community and the American Jewish community to which it is firmly linked.

The past year has been one of consolidation for the University, and a good beginning has been made to laying the foundation to fiscal and administrative processes that the University requires to sustain the strength of its academic enterprise. But much remains to be accomplished.

There follows a brief summary of some of the more important changes, concerns, and new directions in the University.

## The Academy

In order to maintain the strength and quality of the University's widely acclaimed academic program, we must continue to strengthen the scholarly enterprise and shape the curriculum in ways that will be of greatest benefit to our students. During the past academic year four new chairs were fully endowed in the areas of mathematics, history, theater, and American studies. In addition, a grant for \$285,000 was received from the Dana Foundation to help support outstanding junior faculty appointments on the tenure track in each of the next three years. From the Sloan Foundation we received \$250,000 in support of a proposal for enhancing quantitative methodology in the liberal arts curriculum. Brandeis has also been the recipient of a series of grants totaling some \$400,000 that will provide an endowment in support of undergraduate curriculum planning in the areas of mathematics and foreign languages. A grant totaling \$100,000 in financial support and computer equipment has been received from IBM for the new engineering physics track in the undergraduate curriculum of the physics department.



In addition to these successes, the faculty has been unusually productive, and its strength has been underscored many times by its ability to secure research support for those scholarly endeavors that have always marked the Brandeis faculty as among the finest in the country. At a time when other universities are witnessing marked declines in research support, Brandeis' faculty has continued to maintain its competitive edge as reflected in the levels of support it receives.

Earlier this year a new department of computer science was granted formal faculty and Board of Trustee approval. We have been fortunate to make some outstanding new appointments of regular and visiting faculty members in this department for 1984-1985. The undergraduate program in this area is so attractive to students that we must make a strong effort to maintain balance between this and other academic areas. Within the limits of our budget, we have installed state-of-the-art equipment, mounted seminars on advanced topics and built important links to the high technology community.

Exciting new developments are also taking place in cognitive science and neuroscience. Both depend essentially on a regrouping of efforts of faculty members currently on staff, together with one or two additional appointments to fill essential needs in the new configurations. Because much of the University's strength in computer science is in the field of artificial intelligence, there are strong intellectual ties among the computer science, cognitive science and neuroscience programs, and Brandeis' progress in each of these fields nourishes the others. The initiatives give Brandeis high visibility in fresh, rapidly developing fields that complement our strengths in more traditional disciplines.

A program in Peace Studies has been put in place as a "minor" that may be taken by undergraduates as an addition to their major field of concentration. Drawing upon faculty members and courses in half a dozen different departments, the program seeks to integrate the research and writing of many faculty members and build an academic structure within which students can synthesize their learning in several different disciplines. While programs in Peace Studies have been established at numerous American colleges and universities, the Brandeis program is believed to be unusual in the range of disciplines represented and the pluralism of the faculty.

A new Master's program in International Economics and Finance will be a five-year program consisting of three years of undergraduate liberal arts studies, one of which is to be spent abroad, and two years of intensive graduate-level studies. It is designed to prepare a small group of highly qualified students for careers in such fields as banking, business, government, journalism, and the international civil service.

The program in Engineering Physics is designed as a new track within the department of physics and will provide students with an alternate route through the physics curriculum. For the first two years the Engineering Physics student will follow the same curriculum as a student in Basic Physics, but the two tracks will diverge in the third and fourth year. The Engineering Physics track will place considerably greater emphasis on instrumentation and other aspects of high technology, providing a strong laboratory as well as a theoretical experience in these subjects. The program will be especially effective in preparing students for entry into modern graduate programs, whether in physics or engineering, and has been designed to be fully compatible with the University's strong liberal arts orientation.

As part of the process of review and planning for the future, I have asked the Academic Planning Committee to examine the scope of the undergraduate educational program in terms of what it is we are presently doing, the strengths as well as the possible limitations of the current curriculum, changes or innovations that may be desirable, and internal financial reallocations that may be required in order to effect needed change. I have also asked the committee to consider carefully the organizing theme or themes of the curriculum.

Second, I have requested an examination of the desired size of the undergraduate student body considering the possibilities of contraction, expansion, or maintenance of current numbers. This review will also include consideration of the implications of the size of the student body with respect to matters of curriculum, educational policy, finance, the needs of the faculty, economies of scale, and anticipated demographic changes.

Third, the Committee has been asked to examine the relationship of the Heller School and the Rosenstiel Center to the institution as a whole in terms of mission, program, and administration. Fourth, I have requested a review and examination of the scope of the graduate curriculum in terms of our current offerings, their strengths and possible limitations, additions or deletions to programs that may be appropriate, and internal resource reallocations that may be required. Finally, in the context of long-range planning, I have asked for a careful analysis and evaluation of the implications of adding professional schools to the University.

#### **Admission and Financial Aid**

For the second year in a row the University has matriculated one of its largest freshman classes drawn from an increased, highly ranked applicant pool. For the foreseeable future, however, the University will have to contend with strong demographic pressures. At least through the mid-1990's, pressure on Brandeis' traditional northeastern market will continue. This



factor alone will require a variety of initiatives, some of which have already begun: (1) sustained efforts to support a quality of undergraduate life and of academic program that is attractive to potential applicants, (2) careful projection of entering class size with annual adjustments, (3) expanded recruitment in regions outside the northeast, (4) development of new print and visual media for presenting Brandeis to prospective students and others, (5) increased involvement of alumni in the recruitment and admissions process through an expanded Alumni Admissions Council, and (6) continued development of imaginative and attractive recruitment and matriculation techniques, such as merit scholarships and "differential packaging" of financial aid.

The shift to "differential packaging" of financial aid, a program that provides stronger applicants with a more attractive ratio of University grant to loan and job, has been a positive factor in the increased matriculation rate of our best candidates. These financial aid strategies allow the University to derive maximum benefit from our financial aid expenditures and meet competitive forces in the college and university admissions market.

At the same time, Brandeis has maintained a strong need-based financial aid system that provides all accepted students with the necessary funds for enrollment. This need-based policy is important to the maintenance of economic, racial and geographic diversity within the undergraduate population, as well as the matriculation of adequate numbers of qualified students.

As educational costs rise, it will be increasingly important to assist families in identifying and evaluating the various ways to provide funds for a son's or daughter's college education. The office of financial aid is in the process of developing a program that will make it an active participant in counseling families on the options available for financing a Brandeis education. With nearly 45 per cent of our students receiving financial aid in one form or another and the likely decrease in federal financial aid dollars relative to the cost of education, counseling and creative financial aid packaging will become increasingly important elements in the overall admissions effort.

### Student Affairs

The decision taken last year to establish the position of Dean of Student Affairs reporting directly to the President was part of an overall effort to enhance student life on the Brandeis campus by assigning responsibility for this important campus constituency to a senior university officer. The inclusion of athletics and graduate student life within the division is a step toward integrating these vital sectors into the general campus community. The appointment of Dean Roger Crafts signals the beginning of a more active

partnership with students in the development and structuring of campus life and student activities.

The Student Affairs division serves the entire spectrum of a student's out-of-classroom life from residence halls, to health services, career planning, recreation, student activities, and the campus ministry. Divisional goals are being evaluated and a thorough review of all policies, practices and procedures will be undertaken. Particular attention will be given to improved communication and coordination with and between the offices that comprise the division, increased student involvement in the work of the division, and an expansion of opportunities for faculty participation in student life.

Among the specific steps that have been taken are the assignment of a Student Activities Advisor to work with the more than 100 student organizations, the use of an intern from the Graduate Program in Higher Education Administration at Harvard to work with the dean in the assessment of services available to minority students, a review of the student disciplinary systems to improve coordination and communication, an increased emphasis in the athletic program upon recreation and intramurals in order to reach as many students as possible, better utilization of athletic facilities, and new initiatives in residence life. Emphasis is being placed on special programming within the residence system, a strengthening of the Graduate Student Association, and staff development programs for personnel within the division.

Within the department of Residence Life, two staff members who have special training in the field of student development will function as area directors. Their primary goals will be to enhance the residence staff training program and expand residence hall activities throughout the campus. Programming for the current academic year will focus on physical health, intellectual capabilities, interpersonal skills, and vocational choice, with special efforts directed to strengthening the sense of community within the residence halls.

The opening of the Jacob Hiatt Career Development Center brought a major shift in the nature and scope of the Career Planning office. With the growing interest among liberal arts students in career preparation, the Hiatt program clarifies the linkage between academic experience at the University and the world of work. Guidance and support in career preparation free the student to concentrate on the long-range goals of liberal education. Through the University Association Program, specialists currently employed in selected fields will visit the campus to conduct guest lectures and non-credit colloquia or seminars in their professions. The Center will also stress internships, summer employment opportunities, and business and industry roundtables in which corporate leaders will be invited to campus to meet with faculty and students.

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## Development

As we build for the future, we must seek increased support from throughout the country. In order to develop a national base, we will reorganize the development office and re-establish regional offices in Florida, Philadelphia, Chicago, the West Coast, and New England. The New York office will remain in place.

Emphasis within the reorganized regional operation will be placed on coordinated year-round operations in each of the major cities involving special events, major gifts, and annual and planned giving. Local year-round operations that contain both interpretive and fundraising components will move Brandeis closer to local Jewish leadership and facilitate the development and strengthening of Brandeis lay leadership in the community. There will also be a concerted effort to carefully coordinate activities with the National Women's Committee and integrate our approaches to alumni, foster alumni, and friends of the University. . .

## Alumni Affairs

For too long, the alumni of Brandeis have been neglected. We have not made a serious effort to acquaint the alumni with the needs of the University and to make them one of Brandeis' most effective bases of support in the community. For 36 years we have been educating a committed group of young men and women who have taken their places in all areas of society. They care deeply about Brandeis and it is time for us to reach out to them and make them full partners in the University's enterprise.

The appointment of a Senior Vice President of Development and Alumni Affairs is intended to achieve an integration of alumni in development. An integration of alumni and foster alumni is also needed. With the appointment of a Vice President for Alumni Affairs who will report to the Senior Vice President, it is expected that there will be a substantial increase in the type and scope of alumni programming that Brandeis sponsors. Our alumni are among the University's finest representatives in the community and are a resource that deserves our best efforts and most careful attention.

## Public Relations

In the area of public relations the past year has seen an increase in the press and media coverage of the University. An important start has been made to telling Brandeis' story in the right quarters across the country. We must take every opportunity to enhance positive public awareness of Brandeis and the excellence of its programs and its faculty. In this regard, efforts are being made to coordinate carefully our public relations activities with those of the development and admissions offices in support of the

University's fundraising and recruitment objectives. Attention is also being given to the various publications intended for our various constituencies including admissions materials and alumni and development pieces.

## Conclusion

Nearly four decades ago the founding fathers of the University envisioned an institution of the first rank, an institution that had the heart and soul and the heritage of the American Jewish community in all of its undergraduate and graduate efforts, providing an environment in which scholars and students were one in their commitment to the pursuit of knowledge. As a research university with an abiding commitment to the liberal arts at both the undergraduate and graduate levels, Brandeis embraces the pursuit of humanistic education and the transmission of knowledge in all branches of the arts, humanities, and the physical and social sciences.

In the next five years, it is essential that we consolidate the financial underpinnings and the infrastructure of this institution to permit Brandeis to continue in its tradition of excellence. We need to expand, but not seek growth for growth's sake or because of any notion that bigger is better. Brandeis must grow intellectually in fields in which we already have strength, as well as in new areas, including perhaps professional programs. We must continually reaffirm our commitment to the liberal arts and to the development of programs and approaches to education that will give liberal education special meaning for our students. We must expand significantly our applicant pool and re-establish Brandeis as an institution of first choice among this country's best qualified high school graduates. We must also re-establish Brandeis as an innovative leader in American higher education, and re-invigorate the Brandeis campus as a forum and center for intellectual and social activism without reference to political or social ideology. Our commitment to international education has always been a high priority and we must enhance that commitment as reflected in both the curriculum and the opportunities and activities available to faculty and students.

Thirty-six years ago Brandeis was founded as a gift of the American Jewish community to American higher education. Today there exists another powerful reason for support of the institution that has brought pride and prestige to the community as a whole. Brandeis' growth and strength benefit our students — past, present, and future — but the University is also a credit to the community that supports it. American Jewry is enriched by its triumphs of achievement. The gift to American higher education has become a gift to the American Jewish community as well as to the American community at large. ■



## Number of Students Entering Job Market on the Rise

Although the success record for Brandeis graduates seeking to attend professional and graduate schools is as strong as ever, more than half of last year's graduates decided to go straight into the job market.

A recent report released by the Hiatt Career Development Center documenting the post-graduate activities of the Brandeis Class of 1984 shows an increase in the number of students who decided to enter the workforce after graduation.

The report, based on a survey to which 93 percent of the graduating class responded, showed that 58 percent of the recent graduates intended to seek jobs rather than attend graduate or professional school. Of those seeking jobs, almost 50 percent already had found work within three months of graduation.

The report also showed that 16.4 percent of the responding students planned to attend graduate school, an increase of almost six percent over 1983 statistics. But the number of students entering professional schools dropped from 26 percent to 21 percent from the 1984 class.

"The result of our survey seems to correspond with those now being reported at liberal arts universities nationwide," said Marcie Schorr Hirsch, director of the Hiatt Center.

"One of the major reasons for the increased interest is the cost factor," she said. "With graduate school tuitions climbing, many students, especially those with outstanding undergraduate loans, are finding that they can't afford to continue their education immediately after undergraduate school. They hope to work for a few years to raise the money they need before enrolling in a graduate or professional program."

Hirsch said there is also the perception among graduating students of an improving job market. "In the past, many students immediately would opt for graduate or professional school because they felt that they wouldn't be able to get a job right away," she said.

The Hiatt report listed the following fields in which the majority of the 1984 graduates were seeking or already had found positions: computer science/high technology, counseling/psychology, banking, finance, research, consulting, publishing, community organization, paralegal work, advertising. Also, sales, federal government, retailing, broadcasting, public relations, personnel, film, theater, journalism, insurance and city government.

For alumni going on to graduate schools, the most popular fields of study, in descending order, were history, computer science, chemistry, fine arts and economics.

More than 50 law schools across the country accepted Brandeis graduates, with more than 11 reporting 100 percent acceptance rates. Law schools accepting Brandeis 1984 graduates included Harvard, Yale, Stanford, Georgetown, Duke, Emory, Rutgers, New York, Cornell and Columbia universities; William and Mary, Case Western Reserve, New England Law School and New York Law School; and the universities of Chicago, Virginia, Pennsylvania, Illinois, Miami, Michigan, Southern California, California at Berkeley and Connecticut.

Twenty-three business schools accepted Brandeis graduates, including Cornell, Carnegie-Mellon, McGill, Northwestern, Columbia, Boston and New York universities and the University of Pennsylvania (Wharton School). Schools showing a 100 percent acceptance rate include Emory, Duke, Washington, Fordham, George Washington, Indiana, Brown, and Syracuse universities. Also, Case Western Reserve and Miami University of Ohio, and the universities of Michigan, Denver and Delaware.

Thirteen dental schools accepted 24 Brandeis graduates with all but two showing 100 percent acceptance rates.

Thirty-five medical schools enrolled Brandeis alumni this fall including Harvard, Columbia, Rutgers, Tufts, Johns Hopkins, Albert Einstein, Chicago, Temple, Emory, Tulane, Pennsylvania, Georgetown and Brown.



## Halvorson Named to National Council

Harlyn O. Halvorson, professor of biology and director of the Rosenstiel Basic Medical Sciences Research Center, has been named by Health and Human Services Secretary Margaret M. Heckler to the National Advisory General Medical Sciences Council.

Halvorson is one of three new members appointed by Heckler to four-year terms. The Council includes leaders in the biological and medical sciences, education, health care and public affairs. Members review applications for research and research training grants and make recommendations to the secretary and directors of the National Institutes of Health and the National Institute of General Medical Sciences on policy matters and science manpower needs.

A molecular geologist studying the regulation of gene expression, Halvorson is chairman of the Board of Public and Scientific Affairs of the American Society for Microbiology and has been chairman of the Council of Scientific Society Presidents.

## Brandeis in the News

News about Brandeis faculty research and stories about the University have appeared in newspapers and magazines across the country in recent months.

Among some of the major stories:

A full-page story in *The New York Times* education supplement headlined "Brandeis Seeks to Restore Its Old Sense of Identity" was based on an interview with President Evelyn E. Handler.

A front page story in *The Boston Globe's* sports section headlined "Minds Over Bodies at Brandeis." The story focused on the University's athletic achievements and commitment to education.

Research by Malcolm Watson, psychology, on charting children's fantasies was carried by the Associated Press and appeared in hundreds of newspapers.

The AP also ran national stories on the Heller School's Social Health Maintenance Organization program; a study by Randall K. Filer, economics, on the reasons why there is inequity in salary levels for men and women, and Joanna Lion's, Heller School, research on the relative difference in health care costs between outpatient clinics and private doctors.

The United Press International also carried a number of Brandeis stories, including a major archaeological discovery

in Cyprus by Ian and Alison South Todd, and George Cowgill's, archaeology, research which uses computer technology to trace the life of Teotihuacan, a city in central Mexico which thrived long before the Aztec civilization.

The Jewish Telegraphic Agency ran a number of Brandeis stories in Anglo-Jewish newspapers across the country, including a study on Jewish divorce rate by Jay Brodbar-Nemzer, Center for Modern Jewish Studies; a profile on President Handler describing her first year in office and plans for the future, and Thomas Friedman's '75 talk at Brandeis on extremism in the Middle East.

### John B. Anderson and Christopher Ricks Among Visiting Faculty

John B. Anderson, a former congressman and a third party candidate for president in 1980, is among 13 distinguished visitors teaching at Brandeis this academic year.

The visiting faculty also includes **Christopher Ricks**, Queen Elizabeth's appointee to Cambridge University's major chair in English literature. As the Fannie Hurst Visiting Professor of English, he is teaching a course on 20th century poets.

Anderson is teaching a course about the Congress and a seminar on American political parties. He represented the 16th Illinois Congressional District for 20 years until he became a candidate for president, breaking with the Republican party and forming the National Unity Party.

Among other visiting scholars this year: **I. Bernard Cohen**, recently retired Harvard professor of history; **Martin Cohn**, from the Sperry Rand Research Center teaching computer science; **Richard Graham**, University of Texas, the Jacob Ziskind Visiting Professor of History.

Also, **Gabriel Katz**, who received his Ph.D. from Moscow University, in the mathematics department; **Daniel Lehmann**, the Joseph and Esther Foster visiting associate professor of computer science from Hebrew University; **Peter Medding**, also from Hebrew University teaching in the Center for Modern Jewish Studies; **Alan Prince**, the Jacob Ziskind visiting professor of linguistics from UMass-Amherst; **Thomas Sleight**, the Fannie Hurst Poet-in-Residence; **Peter Smith**, Jacob Ziskind visiting professor of history from MIT. Other visiting scholars are **Andreas Teuber**, assistant professor of philosophy and the history of ideas and **Mitchell Wand**, visiting professor of computer science.

### Sachar Videotape is Available

A 24-minute videotape which chronicles the history of Brandeis as seen through the eyes of Founding President Abram L. Sachar is available to alumni and friends of the University.

The videotape, "Abram L. Sachar: The Genesis of Brandeis," features Dr. Sachar talking about the early years of the University, the building of the faculty, honorary degree recipients, major donors, athletics, and the alumni.

Photos and film clips of the early years at Brandeis are interspersed throughout the videotape.

The video is based on nine hours of taped interviews with Dr. Sachar conducted during the past year. It was produced by the Public Affairs Office and is available for \$25 to cover costs and postage.

Checks should be sent to Dr. Sachar Videotape, Public Affairs Office, Brandeis University, Waltham, MA 02254. Please indicate if you prefer VHS or Beta. Allow 3 to 4 weeks for delivery.

### One Million Dollar Jack Meyerhoff Chair Supports Environmental Research

The university has been awarded \$1 million to establish a chair in environmental studies in honor of the late Jack Meyerhoff, a Baltimore real estate developer and philanthropist.

Donald E. Worster, one of the nation's leading environmental historians, was named the chair's first incumbent. He is the author of *Dust Bowl: Southern Plains in the 1930s*, *Nature's Economy: The Roots of Ecology* and *American Environmentalism: The Formative Period*.

The Meyerhoff gift will provide support for research and study on environmental issues, including public policy, history, current practices and America's environmental future.

The gift in honor of Mr. Meyerhoff was made by his widow, Beatrice, and sons, Robert and Harry.



## A Special Celebration

Telegrams of congratulations came from across the United States, Japan, Russia, Scandinavia and other countries. Scientists from this country and abroad travelled to Brandeis for the event. Brandeis graduates came from as far away as California for a one-day symposium on "Positron Studies of Solids Surfaces and Atoms."

All this was to mark and celebrate the 60th birthday of Stephan Berko, the William R. Kenan Jr. Professor of Physics. When asked several months before his birth date by his colleagues and students how he wished to celebrate that milestone, he replied that talking about positron physics was his greatest pleasure.

Colleagues in the physics department and some of his former graduate students decided they would fulfill that desire. They organized a one day symposium on positron physics and invited well known scientists in that field to come and discuss their work.

President Evelyn E. Handler offered welcoming remarks and words of congratulations at the beginning of the seminar and dean of the faculty Anne P. Carter also joined in the celebration for the internationally recognized physicist. The papers presented will be collected and printed later this year.

"The physicists who participated in the symposium came to honor the research of the Brandeis positron group, thus honoring the collective work of faculty, postdoctoral associates, graduate students as well as undergraduate research participants. Their presence honored Brandeis," said Berko.

Berko came to Brandeis in 1961, served as chairman of the physics department and on several major university committees and is credited for building and developing the experimental physics program at Brandeis. His writings on positron physics have been published in leading books and journals in this country and abroad.

## Music Professor Consultant to Library of Congress

Robert L. Marshall, a professor of music and renowned Bach scholar, has been named to a prestigious one-year consultantship at the Library of Congress in Washington, D.C. His term will coincide with the 300th anniversary of the noted composer.

Marshall, who was chairman of the music department at the University of Chicago before joining the Brandeis faculty in 1983, is the first recipient of the Spivacke Consultantship at the Library. The award will be presented annually to a scholar or performer of international standing.

The Brandeis professor will assess the strengths and weaknesses of the Library's holdings on Bach and will make suggestions regarding future policies, publications, and acquisitions. He was scheduled to deliver a formal lecture on March 31, the anniversary of Bach's birth.

Marshall is the author of several books, including *The Compositional Process of J. S. Bach* which won the Otto Kinkeldey Prize of the American Musicological Society. He has also served as chairman of the American Chapter of the New Bach Society and an editorial board member of the American Musicological Society.

## Brandeis Receives \$250,000 from Sloan Foundation

A \$250,000 grant from the Sloan Foundation was recently awarded to Brandeis to support an ambitious program designed to increase the level of technological sophistication and quantitative reasoning skills of undergraduates.

The program — designed by faculty members and administrators — calls for the development of new teaching materials that incorporate an awareness of technology for courses in American studies, anthropology, economics, history, political science, psychology and politics. The grant will also fund the development of a new "laboratory" course in the social sciences to teach students the gamut of skills ranging from defining the program to be solved, through data gathering and analysis, to drawing inferences and making decisions.

The grant will also support a senior-level colloquium course in "Science, Technology and Society;" a series of public colloquia on "Critical Decisions in the Age of Technology;" the Vito Volterra lectures on the history of science, and a semi-annual colloquia on "Humanities, Science and Western Thought."

"The impact of these courses and lectures will touch in some fashion the life of every undergraduate attending the university," according to Dean of the College Attila O. Klein. "Their ability to understand and participate in the making of decisions in today's precocious and complex world should be noticeably improved."



## Renowned Historian Geoffrey Barraclough Dies

Geoffrey Barraclough, a world renowned medieval and contemporary historian who was one of the most distinguished scholars ever to teach at Brandeis, died December 26 of lung cancer in the village of Burford, Oxfordshire, England. He was 76.

The English-born historian, who succeeded the legendary Arnold Toynbee at the University of London in 1956, came to Brandeis in 1968, where he held the Ottilie Springer Chair in Contemporary Western European History.

Although he reached Brandeis' then mandatory retirement age of 68 in 1976, the rule was waived for Barraclough numerous times, to the pleasure of nearly all his colleagues and admiring students who flocked to his classes in record numbers. In 1980, Barraclough was appointed the first and only University Lecturer in History at Brandeis. He retired in 1981. A medievalist whose 1946 book *The Origins of Modern Germany* is regarded as one of the finest works of medieval scholarship, Barraclough is also known for his *Introduction to Contemporary History* which was translated into more than 15 languages.

## Brandeis Graduate Jailed in Yugoslavia

Milan Nikolic, a former Brandeis graduate student, was sentenced to 18 months in prison by the Yugoslav government on charges of spreading "hostile propaganda."

Nikolic was convicted in February after a trial that lasted three months. The original accusation was that he, along with five other Yugoslavs, was involved in a hostile conspiracy. That charge carried longer prison sentences. The charges were reduced after witnesses unexpectedly testified in behalf of the defense.

Over 100 members of the Brandeis administration, faculty, student body and staff signed a telegram that was sent to Yugoslav authorities protesting his prosecution.

While at Brandeis, Nikolic studied with sociology professor Ralph Miliband who, while in Yugoslavia several months ago, met with Yugoslav government officials in behalf of his former student.

Among the material used to incriminate Nikolic was a paper he wrote at Brandeis that analyzed the Yugoslav society and economy. "From a political standpoint, the paper is completely innocuous," says Miliband. "It is a critical survey, but done in a very scholarly and academic way."

Nikolic was jailed on suspicion of counterrevolutionary activities last May and released in August after staging a hunger strike that resulted in his hospitalization. After his release, he returned to Belgrade agricultural research institute where he worked since leaving Brandeis in 1983.

Miliband said Nikolic had hoped to return to Brandeis for his Ph.D. in sociology.

## Three Graduates Among the First Group Admitted to Rabbinical School

Three Brandeis graduates recently made history by being among the first group of women ever admitted to the rabbinical school of the Jewish Theological Seminary of America.

The three are Debra S. Cantor '77 of New York City, Amy Eilberg '76 of Providence, R.I., and Nina Bieber-Feinstein '77 of Los Angeles. A fourth Brandeis graduate, Dvora E. Weisberg '81 of San Francisco, was admitted to the pioneering class, but has deferred admission to complete her Ph.D. in Talmudic studies.

The Jewish Theological Seminary is the only institution in the United States authorized to ordain Conservative rabbis.

The Brandeis graduates, and the 17 other women admitted to the 98-year-old Seminary, are thus in line to become the first women to be ordained rabbis in Judaism's Conservative movement.

There are a number of female Reform and Reconstructionist rabbis throughout the country, but the Jewish Theological Seminary did not vote to admit women into its rabbinical program until last year.

All four Brandeis graduates had been involved in leadership capacities in Jewish communal life on campus through Hillel and Berlin Chapel.

Dear Editor:

I am writing to express concern over the plight of a member of my graduating class, Bernard Coard '67. Articles which appeared in the *Justice* (May, 1984) and the *Watch* (October, 1984) document the imprisonment, harassment, and torture of the Grenadian leader who, while an undergraduate at Brandeis, was instrumental in helping disadvantaged minority students achieve academic equality.

I did not know Bernard personally while at Brandeis, nor have I followed his career subsequent to graduation. However, as an alumnus of an institution founded in the name of a champion of equal justice under law, I am shocked that a fellow-graduate is receiving such inhumane treatment. What is equally shocking is that, aside from the Brandeis articles, the American press has been almost entirely silent on this issue. Bernard seems to have been tried and found guilty by the media. The fact that he protests his innocence has not been reported. Nor has there been any mention of the claims of torture, which has been used to extract statements from Bernard and his compatriots which have already been used against them at the preliminary inquiry.

Bernard's political orientation and his role in the Grenadian revolution are not at issue here. What is significant is that an intelligent and creative alumnus of our institution is being subjected to injustices which we would not tolerate if we knew them to be taking place within our borders. Bernard Coard is, at the very least, entitled to a fair and open trial, with the opportunity to argue his own innocence and publicly to discredit evidence obtained under torture.

The *Watch* article makes it clear that there is an urgent need for funds to pay for legal expenses connected with the case. A fund has been established for this purpose; checks payable to *Fund for the Defense of Bernard and Phyllis Coard* may be mailed to: Sondra Sweigman '70, 145 Lowell Street, Somerville, MA 02143.

I hope all Brandeis alumni will consider making such a contribution in the interest of justice and human rights.

Sincerely

Dr. Curtiss Hoffman '67  
Department of Sociology  
and Anthropology  
Bridgewater State College



## Soccer, Cross-Country Teams Finish High in National Tournaments

The men's cross-country and soccer teams which traditionally rank among the best in the country narrowly missed capturing two national championships last fall.

The soccer team lost in triple overtime (2-1) in the national championship game against Wheaton (Ill.) College and the cross-country squad finished third in the nation.

Although the two teams were among the elite, two of the players were the best: goalkeeper Jim Leahy '85 and cross-country captain Mark Beeman '85.

Beeman won the individual championship at the Division III national tournament. He also earned All-America honors for the third consecutive year.

Leahy was named Goalkeeper of the Year by the Intercollegiate Soccer Association of America and was named the defensive most valuable player of the game in the soccer senior bowl, composed of the best soccer players in the country.

The soccer team's season record of 19-5 was highlighted by a 3-2 victory over New England Division I Champion, Harvard University.

"There are many Division I teams that won't play us any more because we've been so successful against them," said soccer coach Mike Coven. He holds a 12-year career record at Brandeis of 150-36-13, the best among all Division II and III coaches in New England.

The Judges defeated Plymouth State College (2-1), Westfield State College (4-2) and Rochester Institute of Technology (1-0) in NCAA tournament competition before falling to Wheaton.

The cross-country team, coached by Norm Levine, claimed its fourth consecutive Intercollegiate Amateur



**Alison Kibler '87** (Falls Church, Va.) had a record of 6-3 while playing number one singles position for the Judge. She helped lead the team to the MAIAW Class B Championship. Overall the women's tennis team had a record of 5-5.



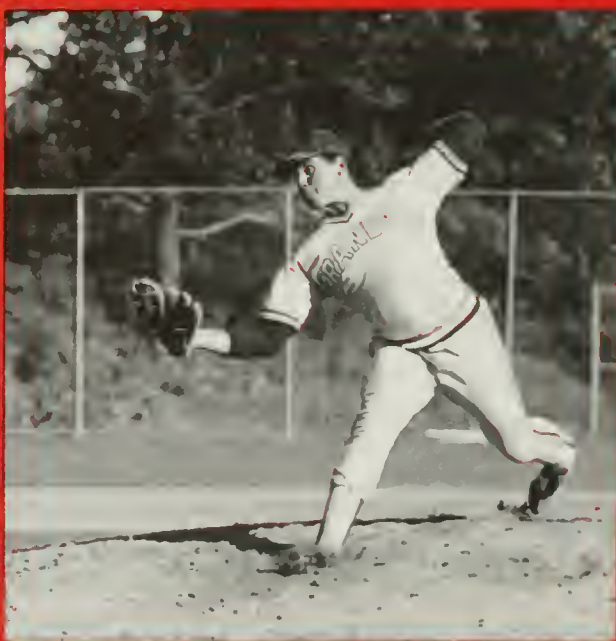
**Robin Greene '86** (Ontario, Canada) spikes the ball into two waiting defenders during a match against Worcester Polytechnic Institute. The women's volleyball team had a record of 21-10 (most wins in a season) and were runner-ups at the Massachusetts Association of Intercollegiate Athletics for Women (MAIAW) Class C Tournament.

**Ross Nadeau '87** (Newburyport, Mass.) helped the Judges to a 16-3 record during the fall baseball season. Nadeau had an individual pitching record of 3-1. For the second year in a row Brandeis won the MIT Fall Baseball Classic.

Athletic Association of America (IC4A) College Division Championship and its 13th straight New England Division III Title to go along with the national third place finish.

Brandeis won the Division III national cross-country championship in 1983 and finished second in the nation in 1981 and 1982.

"At this point, we're getting the kids who really want to come because the word gets out that those who come here get better and better in their individual sports," says Levine, the 1983 Division III National Cross-Country Coach of the Year.





**Dov Bulka '87** (Kadima, Israel) moves past a Harvard defender in the Judges' 3-2 victory over the Crimson. On hand to provide assistance are Glenn Conlon '85 (Dedham, Mass.) and Greg Allen '87 (Sebago Lake, Maine).



All-America **Mark Beeman '85** (Chelmsford, Mass.) paces himself against two University of Maryland runners in an early season cross-country meet. Beeman won the race as the Judges defeated Division I Maryland 26-29.



Tri-captain **Michelle Dante '85** (Billerica, Mass.) gets the ball by a Wheaton defender in the Judges' 1-0 season opening win. The women's soccer team went on to post a record of 8-7-1 and competed in both the

MAIAW Class C and the ECAC Division III tournaments. The women's soccer team became the first women's team in Brandeis history to qualify for an ECAC championship tournament.

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## Faculty

*Christian Hebraists and Dutch Rabbis*

**Aaron L. Katchen**, Assistant Professor of Near Eastern and Judaic Studies; Harvard Judaic Texts and Studies, No. 3

Harvard University Press

This book examines Jewish-Christian relations in 17th-century Amsterdam in light of the widespread study by Christians of the *Mishneh Torah* of Moses Maimonides (1135-1204), the law code written by the greatest of medieval rabbis. The direction provided Christians by Jewish teachers like Rabbi Menasseh ben Israel and the motivations of Christian scholars such as the jurist Hugo Grotius have their echo in today's world as well. An analysis of their writings reveals a variety of Christian approaches to the Jews and Judaism and offers new data about the Jewish communities of Amsterdam, Hamburg, and London.

*The Precious Legacy – Judaic Treasures from the Czechoslovak State Collections*

Coauthored by **Hillel J. Kieval**, Assistant Professor of History and Fellow of the Tauber Institute.

Summit Books

This richly illustrated volume documents the history and significance of Czech Jewry. Written by a team of distinguished scholars from Czechoslovakia and the United States, the book provides the first glimpse of the extraordinary collection of Judaica from the Prague Museum. The book is published in conjunction with an exhibition of

Czechoslovakia's major museums under the auspices of the Smithsonian Institution Traveling Exhibition Service.

*Multinational Excursions*

**Charles P. Kindleberger**, Sachar Professor of Economics

The MIT Press

This collection of lectures, articles and reviews prepared over the last decade focuses on the history of multi-national corporations. It examines the role of these corporations in the international economy and their investment behavior. Chapters range from "The Multinational Corporation in a World of Militant Developing Countries," "Origins of U.S. Direct Involvement in France" to "Plus ça change — A Look at the New Literature." Kindleberger's policy statements before national and international governments are also included.

*Voices of Jacob, Hands of Esau: Jews in American Life and Thought*

**Stephen J. Whitfield '72**, Associate Professor of American Studies

Archon Books

American Jewish culture is the basic theme in the 14 essays included in this volume. The author discusses American Jewish intellectuals and their responses to totalitarianism, Jewish liberalism and radicalism, the Holocaust in the American Jewish mind, and Jews in the American South. A section about the place of Jews in American mass culture discusses Jewish contributions to

comedy, music and journalism. All of the essays previously appeared in journals and anthologies.

**Alumni/ae**

*To the Tenth Generation*

**Rita Kashner '64**

G. P. Putnam's Sons

By ancient Jewish law, Dani is an outcast. As the child of an adulterous affair he is branded a bastard, allowed to marry only another bastard, as will his children, "to the tenth generation." Conceived and condemned through the obsessions of his mother, Dani learns to live with the stigma and tries to succeed as a social exile. In this novel, Rita Kashner creates a story that unfolds through the depiction of characters set against Israeli cultural attitudes. It is the story of a young man whose struggle for identity imbues him, like his country, with the will to survive against all odds.

*Through the Door*

**Jo Anne Yarus Randall '64**

Stein and Day

A novel that focuses on psychotherapist Leah Buchanon, whose patients, by exposing their lives to her during their weekly sessions, trigger disturbing flashbacks into her own past. Through these scenes and recollections the reader learns secrets Leah has buried within herself. The clash between the private and professional woman surfaces when the main character is confronted with an attractive patient who tempts her to give up her professional role.

*Jewish and Female Choices and Changes in Our Lives Today*

**Susan Weidman Schneider '65**

Simon and Schuster

The book provides an exhaustive and provocative study of the diverse ways Jewish women live today in light of the feminist revolution. The author, founder of the Jewish feminist magazine *Lilith*, examines ways in which women are reshaping private lives and public institutions. A sample of the information provided includes how to care for an aging parent; raise a child as Jewish when one's husband is not; become a rabbi; find a Kosher shelter for battered Jewish women; start a Jewish feminist study group; and survive a Jewish divorce.

*Louis D. Brandeis: Justice for the People*

**Philippa Strum '59**

Harvard University Press

Philippa Strum charts a lively account of Justice Brandeis' life and legacy, based on ten years of research using sources previously not available. She reveals new information and provides a more meaningful context to personal and historical events, including Brandeis' emergence in his late fifties as a leading American Zionist. The development of Brandeis' industrial-era Jeffersonian philosophy, which was influenced by the classical ideals of Periclean Athens, is also examined. This extensive biography provides well documented insight into the life and times of one of the foremost defenders of civil liberties and democracy in the history of the United States.

**Laurence F. Abbott**

associate professor of physics, spoke at the Fermilab this summer, the national accelerator laboratory, and at a meeting of quark matter in Helsinki.

**Jeffrey B. Abramson**

associate professor of politics, had his book *Liberation and its Limits: The Moral and Political Thought of Sigmund Freud*, published in the fall by Free Press.

**Teresa M. Amabile**

associate professor of psychology, gave the keynote address on "Frontiers of Creativity Research" at the Creative Problem-Solving Institute's research symposium. She also presented two papers at the American Psychological Association and spoke at the MIT Sloan School of Management.

**Kathleen Barry**

assistant professor of sociology, addressed the International Abolitionist Federation meeting at the United Nations in Vienna on "Prostitution as a Mass Market Commodity." Her book *Female Sexual Slavery* has been reissued by New York University Press in a new edition with a new introduction. The book has also been published in Norwegian.

**Jay Brodbar-Nemzer**

assistant professor of contemporary Jewish studies, chaired a panel on The American Jewish Family at the National Council on Family Relations annual meeting in San Francisco. Two of his articles have been accepted for publication: "Divorce in the Jewish Community: The Impact of Jewish Commitment" which will appear in the *Journal of Jewish Communal Service* and "Sex Differences in the Attitudes of American

Jews Toward Israel," to be published in *Contemporary Jewry*.

**Gerald W. Bush**

senior research associate and lecturer, Heller School, is editor-in-chief of a new journal called "Compensation and Benefits Management."

**Jacques Cohen**

chair, computer science department, is co-chairman of the technical committee for the International Logic Programming Symposium. The meeting will bring 400 computer scientists to Boston in July 1985.

**Peter Conrad**

assistant professor of sociology, presented papers at the conference for Anthropology and Health in Dubrovnik, Yugoslavia and at the Society for the Study of Social Problems, where he was elected to the board of directors. He recently published "The Meaning of Medications: Another Look at Compliance" in *Social Science and Medicine*. He combined with assistant professor of sociology **Shulamit Reinharz**, in coediting a special issue of *Qualitative Sociology* on "Computers and Qualitative Data."

**William H. Crown**

senior research associate and lecturer, Heller School, received a grant from the Economic Development Administration to examine the impact of the elderly on the labor force. He received another grant from the Urban Mass Transportation Administration to study the effectiveness of subsidy programs in improving the mobility of the elderly. He was moderator at the first national conference on Transportation for the Elderly and Handicapped, held in Florida.

**Paul Georges**

Charles Bloom Professor of Arts and Design, had a show of his paintings, "Manhattan Art," at the New York Gallery.

**Irving Epstein**

professor of chemistry, gave invited lectures on oscillatory chemical reactions at Wesleyan University, City College of New York, Eastern Nazarene College, University of Montana, University of California at Santa Cruz, and at the conference on Non Equilibrium Dynamics in Chemical Systems in Bordeaux, France. He chaired a session on computers and chemistry at a meeting of the New England Chemistry Department Chairmen. He was also a guest of the Hungarian Academy of Sciences and lectured at Eotvos University and the Technical University of Budapest, the Central Research Institute for Physics, and Kossuth University in Debrecen.

**Robert Evans Jr.**

Atran Professor of Labor Economics, spoke on "The Transition from School to Work: The United States," at the East West Center in Honolulu.

**Gordon Fellman**

associate professor and chairman of the sociology department, organized and chaired a session at the summer meeting of the Society for the Study of Social Problems in San Antonio. He also delivered a paper entitled "Where Do Individual Choice and Action Fit into Sociological Inquiry?: The Nuclear Threat Case."

**Judith Ferster**

assistant professor of English, delivered two papers, "Interpreting Chaucer" and "The Wife of Bath: Reading the Self" at the International Congress on Medieval Studies at the Medieval Institute, Western

Michigan University. She was also on a panel that taped a radio program on the Middle Ages for "Soundings," the nationally syndicated radio program originating from the National Humanities Center in North Carolina.

**Philip Fisher**

professor of English, holds an Exxon Fellowship in the Program of Science, Technology, and Society at MIT where he is completing a book during his 1984-85 leave. His book, *Hard Facts: Setting and Form in the American Novel*, was published by Oxford University Press. He recently gave lectures at the Freie Universitat, Berlin, MIT and Harvard Universities.

**Lawrence H. Fuchs**

Meyer and Walter Jaffe Professor of American Civilization and Politics, was elected to the boards of Wesleyan University Press and The Refugee Policy Group, a Washington-based think tank on refugee and immigration matters. His article "Reforming Immigration and Naturalization Policy" appeared in the *University of Michigan Journal of Law Reform*. Another article, "Cultural Pluralism and the Future of American Unity: The Impact of Illegal Aliens," was published in *International Migration Review*. Additional articles on immigration appeared in the op-editorial pages of the *Washington Post*, *New York Times* and *Los Angeles Herald Examiner*.

**Martin Gibbs**

Abraham S. and Gertrude Burg Professor in Life Sciences, was a consultant to the Twentieth Century-Fox film titled "Biohazard."



**David G. Gil**

professor of social policy, Heller School, had his articles "Reversing Dynamics of Violence by Transforming Work" published in *Journal of International and Comparative Social Welfare* and "Institutional Abuse: Dynamics of Prevention" in *Catalyst*. He presented a paper "The Future of Work: Redefinition, Reorganization, Redesign" at the annual meeting of the Association for Humanist Sociology. He also received grants from the Levinson Foundation, the Circle Fund, and Libre Fund, for support of the Center for Social Change Practice and Theory at Heller, where he is director.

**Andrew Hahn**

assistant dean, Heller School, spoke on "Youth Employment Programs — What Should be Supported by Grantmakers?" at the annual meeting of the Council of Foundations in Denver, Colorado, and the annual meeting of Corporate Grantmakers in Washington, D.C. In September, he was a member of an American team of researchers sent to Italy for a week-long meeting on the "Transition from School to Work" supported by the German Marshall Fund. He testified before Congress on the proposed Youth Incentive Employment Act and was awarded a grant from the J. M. Foundation of New York to conduct a follow-up survey of participants in an "enriched" summer jobs program.

**Geoffrey Galt Harpham**

assistant professor of English and American literature, had a book *On the Grotesque: Strategies of Contradiction in Art and Literature* published by Princeton University Press. His article "Joseph

Conrad and the Art of the Preface" was published in *Canadian Review of Comparative Literature*; and another on "E. L. Doctorow and the Technology of Narrative" in *PMLA*. His reviews appeared in *Raritan*, and *Contemporary Literature*. He also delivered a paper "A Preface to Conrad's Prefaces" at the MLA convention and received a grant from the Mazer Fund.

**Gila Hayim**

associate professor of sociology, presented a paper on "Hegel's Theory of Mediation" at the annual meeting of the Society for Phenomenology and the Human Sciences. She also chaired a session on "Science, Technology and Weltanschauung" and presented a paper at the annual meeting of the Humanities and Technology Conference.

**Tim Hickey**

instructor of computer science, received a fellowship to attend a course at the Advanced NATO Study Institute.

**Thomas C. Hollocher**

professor of biochemistry, lectured on inorganic nitrogen metabolism of soil bacteria in China under the invitation of the Ministry of Agriculture. He lectured at several universities, institutes and medical schools in China.

**Gary Jefferson**

instructor in economics, presented a paper, "Unemployment and Inflation in the 1970s: Structural Change or Policy Induced?" at the Urban Institute in Washington.

**William P. Jencks**

Gyula and Katica Tauber Professor of Biochemistry and Molecular Pharmacodynamics, attended the FEBS meeting in Moscow where he spoke on "How

**Does ATP Make Work?"**

The same talk was given to a group of dissident scientists who were not allowed to attend the FEBS meeting.

**William A. Johnson**

Albert V. Danielsen Professor of Philosophy and Christian Thought, lectured at the following universities: Lund and Uppsala Universities in Sweden; University of Copenhagen in Denmark; Kyoto, Tokyo and Sophia Universities in Japan; Seoul University in Korea; Emory University in Georgia; University of Colorado and Queens College of the City University of New York.

**Charles P. Kindleberger**

Sachar Professor of Economics, was awarded an honorary Doctor of Science in Economics by the University of Pennsylvania. His book *Multinational Excursions* was published by MIT Press.

**Karen Klein**

associate professor of English, spoke on "Bodies Political" for Amnesty International at the Riverdale Country Day School. One of her charcoal and pastel drawings was included in the fifth annual drawing competition at the Mills Gallery in Boston.

**Miroslav Krek**

lecturer in Near Eastern and Judaic Studies, has been awarded an American Research Center in Egypt Fellowship to research Arabic block printing.

**Daniel Lehman**

visiting associate professor of computer science, presented a paper, "Knowledge, Common Knowledge and Related Puzzles" at the ACM Symposium on Principles of Distributed Computer held in Canada.

**Robert Lerman**

senior research associate, Heller School, published with Shlomo Yitzhaki, "A Note on the Calculation and Interpretation of the Gini Coefficient" in *Economic Letters*. He also completed an analysis of Project Renewal's housing initiatives for the International Committee for the evaluation of Project Renewal sponsored by the Government of Israel and the Jewish Agency. He was awarded a grant by the Department of Health and Human Services to study the causes and consequences of becoming a young unmarried mother or a young absent father.

**Martin Levin**

associate professor of politics, chaired the annual Research Conference of the Association for Public Policy Analysis and Management, and had a book, *The Political Press*, published by Pergamon Press.

**Norman E. Levine**

associate professor of physical education, had two articles published in *Boston Running News Magazine* on "Collegiate Cross Country Preview," and "Training for Indoor Track."

**Arthur Lewbel**

assistant professor of economics, co-authored "Run for the Money," an educational home computer game that teaches the principles of business and economics, published by Scarborough Systems, Inc.

**Henry Linschitz**

Helena Rubinstein Professor of Chemistry, presented a paper at the U.S. Department of Energy, Solar Photochemistry Research Conference, at the Gordon Research Conference on Electron Donor-Acceptor Interactions. He also

presented a paper at the International Photochemistry Conference at Harvard where he also chaired a session.

**John M. Lowenstein**

Rubinstein Professor of Chemistry, accepted an invitation to serve on the Scientific Advisory Committee on Biochemistry of the American Cancer Society.

**Roy C. Macridis**

professor of politics, had his book, *Foreign Politics in World Politics*, published by Prentice-Hall appear in its sixth edition. His new book *Greek Politics at the Crossroads – What Kind of Socialism* was recently published by Hoover Institution Press. He spoke at the Center for International Studies at Emory College on "The Crisis of the European Common Market."

**Peter Markman**

assistant professor of fine arts, had his work exhibited at the National Sculpture Society Annual Exhibition at the Salmagundi Club Gallery in New York City.

**Danielle Marx-Scouras**

assistant professor of romance and comparative literature, was awarded a grant by the American Council of Learned Societies to attend last summer's International Congress of the International Federation of Modern Languages and Literature held in Budapest. At the conference she presented a paper on the "Cultural Politics of *Tel Quel*." She also had an article published in the *Proceedings* of the First World Congress on Francophone Literature.

**John F. Matthews**

Max Richter Professor of American Civilization and Institutions, retired

this year after 30 years of teaching at Brandeis. He was former chairman of the Theater Arts department and later joined the American Studies Department.

**Teresa Mendez-Faith**

assistant professor of Spanish, lectured at the Panamerican Society of New England; presented a paper at the Second International Symposium of Latin American Literature and was an invited guest on a radio program sponsored by the Universidad Tecnologica de Buenos Aires. Her "Interview with Elene Poniatowska" appeared in *Atlantis: A Women's Studies Journal* and an essay on the novels of Roa Baston appeared in *Revista de Estudios Hispánicos*.

**Ruth S. Morgenthau**

Adlai E. Stevenson

professor of international politics, spoke on agriculture and state formation in Africa at the Council on African Studies, Yale University. With Henry Morgenthau, she organized a photo exhibit of Eleanor Roosevelt shown at Brandeis and Kennedy Library. She also presented a video-tape preview on "Eleanor Roosevelt's World."

**Martha Morrison**

assistant professor of classical and oriental studies and Petric Term Assistant Professor of University Studies, presented a paper on the Land of Gerar project, at the annual meeting of the American Schools of Oriental Research in Dallas. She also chaired the session on Archeology and Ancient History at the meeting of the American Oriental

Society and lectured at the University of Pennsylvania and Hebrew College.

**Alfred Nisonoff**

professor of biology and Rosenstiel Basic Medical Sciences Research Center, was appointed chairman of the Allergy and Immunology Study Section at the National Institutes of Health.

**Jessie Ann Owens**

associate professor of music, had an article "The Milan Partbooks: Evidence of Cipriano 'de Rore's Compositional Process" appear in the *Journal of the American Musicological Society*. Professor Owens also delivered papers at the International Convention for Franciscan Studies in Assisi and at the annual meeting of the American Musicological Society of Philadelphia.

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**Benjamin Ravid**  
Jennie and Mayer Weisman Associate Professor of Jewish History, had his invited paper on "Daniel Rodriga: Inventore of the Scala of Spalato" read at the International Conference on "The Mediterranean and the Jews: Banking, Finance and International Trade" held at Bar Ilan University.

**Paula Rayman**  
assistant professor of sociology, was appointed to the National Review and Evaluation of Unemployment Research Commission of the National Institutes of Mental Health; presented papers on the meaning of unemployment at the North American Labor History Conference at Wayne State University, and at the Henry A. Murray Research Center at Radcliffe College. Professor Rayman was elected to the World Conflict Council of the American Sociological Association.

**Shulamit Reinhartz**  
assistant professor of sociology, spoke on "Feminism and Method" at the Yale University School of Organization and Management and chaired a session on "Ethnicity and the Older American" at the meeting of the Gerontological Society of America.

**Zick Rubin**  
Louis and Frances Salvage Professor of Social Psychology, had his introductory textbook *Psychology: Being Human*, published by Harper & Row, appear in its fourth edition.

**Abram L. Sachar**  
chancellor of the university, received an honorary degree at the University of Denver where he also installed the endowed chair in Judaic Studies. The Denver honor marked his 28th honorary degree. Dr. Sachar also spoke at Endicott College's Convocation.

**Gregory Saltzman**  
assistant professor, Heller School, has been invited to participate in a National Bureau of Economic Research study of public-sector labor unions.

**Susan Scheinberg**  
assistant professor of classic and oriental studies, delivered a paper "Aristophanes' *Thesmophoriazusae* and the Charges Against Euripides," at the American Political Science Association convention.

**Howard J. Schnitzer**  
professor of physics, was at the CERN laboratory in Switzerland in August. He also spoke at the University of Pennsylvania on "Supersymmetric Skyrmions."

**Susan L. Shevitz**  
lecturer in Jewish education, Hornstein Program, presented a paper, "The Deterioration of the Profession of Supplementary School Teaching: An Analysis of the Effects of Communal Myths on Policy Program" at the International Research Conference on Jewish Education. The meeting was sponsored by the Hebrew University's Melton Centre for Jewish Education in the Diaspora.

**Bill Shipman**  
fencing coach, was a staff member of the U.S. National Elite Junior Training Center helping develop future Olympic fencers.

**Leigh Snedden**  
assistant professor of physics, was an invited speaker at the International Conference on Charge Density Waves in Solids held in Hungary. He had four articles published in *Physical Review* and had his grant from the Air Force office of Scientific Research renewed.

**Bennett Solomon**  
lecturer in Jewish education, participated in the International Research Conference on Jewish Education at Hebrew University. He read a paper entitled "Theory Into Practice: Curriculum Innovation in the Jewish Day School" and led a discussion group. Proceedings of the conference will be published by the Hebrew University's Magnus Press.

**Louis S. Stuhl**  
assistant professor of chemistry, presented a paper on "Reactions of Low-Valent Metal Cyanides with Nucleophiles and Electrophiles" at the meeting of the American Chemical Society.

**Serge N. Timasheff**  
professor of biochemistry, gave an invited lecture at the International Biophysics Congress in England and the European Molecular Biology organization at the Medical Research Council in England.

**Stephen J. Whitfield**  
associate professor of American Studies, delivered a paper to the Israel Association for American Studies in Tel Aviv. He also had articles published in *American Jewish History* and *Dictionary of Literary Biography*.

**Jeffrey Williams**  
assistant professor of economics, published "Fractional Reserve Banking in Grain" in the *Journal of Money, Credit, and Banking*.

**Kurt H. Wolff**  
Emeritus Manuel Yellen Professor of Social Relations, presented papers at meetings of learned societies in Strasbourg, Ljubljana, Bielefeld, Munich and Konstanz, and lectured at the Universities of Zagreb, Wuppertal, Amsterdam, Aachen, and Bochum. He also published a book on the sociology of knowledge in Serbocroatian and on sociology and phenomenology in Italian. He had a review appear in *Contemporary Sociology*.

**Peter Woll**  
professor of politics, had the fifth edition of his book *Behind the Scenes in American Government* published by Little Brown and Co.

**Harry Zohn**  
professor of German, gave three lectures this past summer at the Vienna Symposium of the Colorado Music Festival. He also presented a paper on Theodor Herzl at the silver anniversary convention of the American Translators Association when he also received a citation as a founding member. His book *In These Great Times* was reissued by the Carcanet Press in England. He also had articles published in *Cross Currents*, *Modern Austrian Literature* and *New American Review*.

**Irving Kenneth Zola**  
professor of sociology, was appointed to the Special Needs Advisory Board of the Museum of Fine Arts in Boston.

'55

**Dr. Herbert Bressman** has been elected to the fellowship of the American College of Dentistry and elected vice president of the New Jersey Dental Association Fund for Dental Health.

**Nancy W. Greenblatt** is the executive director of the National Organizations Advisory Council for Children, a coalition of 500 national voluntary organizations concerned with child welfare issues. Nancy presented the keynote address at the International Conference for Learning Disabilities, held in Nova Scotia.

'57

**Dr. Janet Cohen David**, a senior staff psychotherapist for the Center for the Study of Anorexia and Bulimia is also director of its Eating Disorders Education's Project in New York, where she maintains a private practice in psychotherapy.

**Lawrence J. Kane** was named vice president for college relations at Benedictine College; he was presented the William A. Lynch award for 1984 at the Third International Symposium on National Family Planning in Boston.

'59

**Harry B. Cohen** is an adjunct professor of psychiatry and human behavior in the College of Medicine at the University of California at Irvine. He also has a private practice at the Laguna Beach Center for Sexual and Marital Therapy.

**Paulette Feigenbaum Rose** operates an unusual book business in New York City. Her collection of over 1,000 rare volumes by and about women, contains uncommon books on women in the suffrage, abolition, and labor movements, as well as their participation in other disciplines. Paulette began collecting books as a graduate student and later decided to go into the book business with encouragement from Isidor Berkelouw, a fourth generation Australian bookseller. As a new member of the Antiquarian Booksellers Association of America, Paulette displayed some of her collection at their show held in October in their headquarters in Rockefeller Plaza.

**Philippa Strum's** book *LOUIS D. BRANDEIS: Justice for the People* was published by Harvard University Press last May.

'60

**Dr. Arnold Jacobson** is chairman of the obstetrics/gynecology department at John Muir Memorial Hospital in Walnut Creek, California, and director of its new program for in vitro fertilization.

**Daniel Werner** and Judith Werner announce the birth of their son, Benjamin Victor Werner.

'61

**Arthur Drache** was appointed a Queen's Counsel in Canada last January. He published his eighth book last March entitled, *It's Your Future; a Canadian Guide to Estate Planning*. Arthur is currently practicing law in Ottawa, Canada, and writes about legal matters for both professionals and laymen.

**Brenda Dolgin Spangler** received her Ph.D. in chemistry from Northern Illinois University. She is a research associate and instructor in the department of microbiology and immunology at the University of Illinois.

**Martin Zelnik** was honored by the New York Society of Architects recently when his design for a new synagogue was one of nine selected for exhibition. In addition to having his own architectural firm, Martin was recently named chairman of the interior design department at Fashion Institute of Technology in New York, where he is a professor.

'62

**Barbara Rosenberg** is an information specialist for Schneider Parker Jakuc Inc., a Boston marketing communications firm. The firm specializes in advertising, research, collateral design and telephone directory marketing.

'63

**Adriano A. Arcelo** resides in Manila where he is vice president of the Fund for Assistance to Private Education. Adriano is listed in the seventh edition of *Who's Who in the World*, for his contributions to the Philippines where he has served on various councils for higher education.

**Nancy Lichman Braganti** is co-author of *The Traveler's Guide to European Customs and Manners*, published by Meadowbrook Press last January.

'65

**Michael Eschelbacher** was named president of the North Shore Jewish Community Center. Michael maintains a private law practice in Boston, and lives in Swampscott with his wife **Rozlyn Cooperstein** '65 and their three children.

**Joel M. Rubin** lives in Bala Cynwyd, Pennsylvania with his wife Susan Jones and children Molly Kate age 6, and Stephen, born last February. Joel is the regional manager of the Lawyers Cooperative Publishing Co.

'66

**Richard B. Jacobson** opened his own practice in August, in association with independent attorneys Borns, Porter, Macaulay & Jacobson.

**Esther R. Seidman** was one of the members of the Boston Women's Health Book collective involved with writing the new edition of *Our Bodies, Ourselves*, scheduled for publication in January 1985, by Simon & Schuster. Esther has also helped develop voluntary tampon standards as well as analyzed the cultural aspects of premenstrual syndrome treatment.

'67

**Thomas L. Abrams** is practicing law with the New York City law firm of Surrey and Morse.

**Gary D. Lander** was made a partner in the Chattanooga, Tennessee law firm of Chambliss, Bahener, Crutchfield, Gaston & Irvine in June 1984. Prior to joining the law firm, Gary served for almost 12 years as special counsel to the city of Chattanooga in practice as an attorney for the city.



**Yona Nelson-Shulman** resides in Monmouth Beach, N.J. where her consulting firm in Management Training and Psychological Services is located. Last March, Yona published an article entitled "Information and Environmental Stress."

Born to **Paulette Jellinek** and Sid Perloe, a daughter, Alexandra Hayan, on January 11, 1984.

'68

**Phillip A. Saperia** is director of Planning and Government Relations for The Hebrew Immigrant Aid Society (HIAS).

**Mark Simon** is a member of the architectural firm Centerbrook, formerly Moore, Grover Harper in Essex, Connecticut. Mark and Penelope Bellamy announce the birth of their son, Thomas Jefferson Simon, on April 13, 1984.

**Diane Levin** and Larry Gall adopted a daughter, Sarah Beth, in June 1983.

'69

**Allyn Shepard** is a staff attorney for Alexander & Alexander Service Inc. concentrating on U.S. Securities and Exchange Commission matters. Allyn holds a master's degree from New York University and her J.D. degree from Rutgers Law School.

**Richard Liroff** and Sylvia Riggs were married on April 7, 1984 in Washington, D.C. **Randolph Becker** '68 and Gayle Lehnman-Becker officiated.

'70

**Marilyn K. Cranney**, vice president and assistant general counsel of the Inter Capital Division of Dean Witter Reynolds, Inc. in New York City, received the degree of Master of Laws in Taxation from New York University School of Law in May 1984.

**Rabbi Jeffrey A. Foust** has been the Rabbi of Temple B'nai Abraham in Beverly, Massachusetts since August. He was adjunct professor in Jewish studies at the University of Southern Florida in Tampa, prior to returning to New England.

**Pranay Gupte** published an article entitled "Third World Success Story" in the June 18 issue of *Forbes* magazine last year. The article is about Sri Lanka's successful entrance in the free enterprise system. Pranay recently published another book, *The Crowded Earth: People and the Politics of Population*, issued by W. W. Norton.

**Ellen Silberstein Friedell** and **Steven F. Friedell** '71 announce the birth of a son, David Jonathan, on February 27, 1984.

Born to **Laurence S. Hyman** and Ann L. Hyman, a son, Daniel Nicholas, on October 3, 1983.

'71



**Micah Bertin** and his wife, **Laura**, are mime performers on the Caribbean cruise ship *S.S. Mardi Gras* where Micah is assistant cruise director. They recently returned from a performance tour of Europe.

**Bess Cutler** moved to New York City where she opened an art gallery which features the work of emerging artists from the Boston area. Prior to her move to New York, Bess had been with the Boston Gallery Cutler/Stavanidis for five years.

**Jack Dembowitz** is a representative of the Wall Street based firm of First Investors Corporation.

**Susan Panoff** was named director of public relations for the Grand Bay Hotel in Coconut Grove, Florida. Ms. Panoff is also the chairperson for the Brandeis University Admissions Council in Miami.

Born to **Deborah Abramson Corenthal** and Norman Corenthal, a daughter, Anna Emily, on January 10, 1984.



**Janice Popick Rosenzweig** is a medical representative for Syntex, a pharmaceutical company.

**Barbara Blank Wolfson** is a group facilitator and center coordinator for the Merrick-Baltimore Mothers Center in Long Island, N.Y. The center is a support, discussion, and research organization well known in New York serving as a role model for similar centers around the United States.

We just heard that **Michael Goldman** and Susan Colgate were married on July 18, 1982. They are the proud parents of a daughter, Cedar Marian, on July 11, 1983.

**Jordan E. Tannenbaum** and Fran Linda Kobel were married on June 2, 1984. Jordan is associate director of regional development for Brandeis.

Born to **Jane Marke**, M.D. and Anthony Pisciotta, M.D., a son, Benjamin Marke Pisciotta, on January 14, 1984.

'72

**Michael Goldman** lives in Cameroon, West Africa, where he is an agricultural economist.

'73

**David Ash** is an attorney with Corbin, Silvermon and Sanseverino in New York City. David and his wife, Karen Artz Ash, an attorney with Amster, Rothstein & Engleberg, are the proud parents of a daughter, Kimberly Barbara, born last March.

**Freya S. Bernstein** received her J.D. degree from Northeastern University School of Law in Boston in May 1984.

**Dr. Lee J. Brooks** was appointed assistant professor of pediatrics in the pulmonary division of Rainbow Babies and Children's Hospital/Case Western Reserve University in Cleveland. Dr. Brooks married Dr. Ellen Freedman in August 1983.

**Dr. Anne Lobock Fenton** is a fellow in child psychiatry at McLean Hospital in Belmont, Massachusetts. Dr. Fenton also holds a master's degree in genetics from Hebrew University. Her four children are all Brandeis alumni: Eli '78, Reubin '80, and her twin daughters Eva and Leah both members of the class of '83.

**Dr. Jonathan Greenberg** and **Galya (Gloria Pinsky) Greenberg '75** now live in West Hartford, Connecticut with their sons Ethan, 4, and Ezra, 1. Jonathan works at Mt. Sinai Hospital, and has a private practice in psychiatry.

**Marshall Herskovitz** and **Susan Shilliday '74** live in Santa Monica, California with their daughter Elizabeth, born March 1, 1983. Marshall wrote and co-produced the NBC television movie "Special Bulletin" which won the Humanitas Prize and four Emmy Awards last year.

**Dr. Kathy L. Lampl** is associated with the Allergy Center in Silver Spring and Rockville, Maryland.



**Linda K. Pine** is president of the International Association of Personnel Women. She is director of Human Resources at Collaborative Research Inc., a biotechnology firm engaged in pharmaceutical and genetic research.

Born to **Michael Hampton** and Erika Flory, a son, Jonathan Ross, August 4, 1984.

**Ellen Feldman Lunn** and Randall R. Lunn announce the birth of a daughter, Meredith Ann, on May 22, 1984.

Born to **Barbara Motenko Stone** and Robert D. Stone, a son, David Geoffrey, on April 3, 1984.

'74

**Bonnie Rae Bloch** recently wrote to tell her friends and classmates that she is "still an unemployed J.D., M.D. and will continue to enjoy life by remaining at home with Lesley Beth, age 3, and Sierva, born April 28, 1984."

**Lisa Jean Brandzel** received her J.D. degree from Northeastern University School of Law in Boston in May 1984.

**Jack Gildron** (nee Gilberg) resides in Haifa, Israel with his wife, Amy Robbins, and their son, Ro'ee. Jack is pursuing a Ph.D. in desalination research at the Technion in Haifa.

**David DiMarzio** is a district court bar clerk with the U.S. District Court in Boston, Massachusetts.

**Michael H. Singer** is general counsel at St. Barnabas Hospital in the Bronx, New York City. Prior to his new position, Michael served as a member of the general counsel's office at the Mount Sinai Medical Center in New York City.

**Stanley H. Wakshlag** was appointed counsel to the firm of Akerman, Senterfitt & Edison last August in Orlando, Florida. He is also active as director of the Miami Jaycees. Stanley received his J.D. from the New York School of Law in 1978.

Born to **Donna Lubin Goldman** and Cal Goldman, a daughter, Wendy Heather, on April 27, 1984.

'75

**Dennis Blejer** works as principal engineer in the electromagnetic systems analysis department at Sperry Electronic Systems in Waltham, Massachusetts.



**Tom Friedman** Pulitzer Prize winning journalist and New York Times bureau chief in Jerusalem, spoke at Brandeis in the fall on "The Rise of Extremist Violence: A Personal Retrospective." He also met with students in large and small groups to discuss Mideast issues. Friedman, who graduated summa cum laude, was Beirut bureau chief for the Times until his appointment last year to head the Jerusalem bureau. He won the 1983 Pulitzer Prize for International Reporting for his coverage of the war in Lebanon.

**Kim S. Geringer** directs the mental health program for abusive parents and their children at the Family Resource Center in Jersey City, N.J. Kim and her husband, Colin Dunn, have a daughter, Rachel, born September 1982.

**Richard D. Gilbert** received his Ph.D. degree in chemical physics from SUNY-Stonybrook last May. He is a research associate in theoretical chemistry at the Brookhaven National Lab on Long Island. Richard and his wife, Hermine, live in Sea Cliff, N.J. with their daughter, Elia Urit, born December 1983.



**Dr. Nancy Gordon** lives in Baltimore with her husband, Dr. Paul Lipkin, and their daughter, Eliza Meryl, born September 1983. Nancy is in residency at Sinai Hospital in Baltimore, specializing in obstetrics and gynecology. Paul is a fellow in developmental pediatrics at Johns Hopkins University in Baltimore.

**Robin Katz** and **David J. Lewkowicz '74** reside in Chicago with their two children. David is conducting research in child development at the Institute for the Study of Developmental Disabilities at the University of Illinois. Robin is an associate at the law firm of Pretzel & Stouffer in Chicago.

**Paul E. Linet** is a customs and international trade attorney with the Miami based firm of Sandler & Travis. Paul married Susan D. Hirschberg, M.D., in New York on April 14, 1984.

**Peter B. Schiff** received his M.D. degree from the Albert Einstein College of Medicine last May. Dr. Schiff continues his clinical training in therapeutic radiology at the Memorial Sloan-Kettering Cancer Center in New York City.

**Virginia Faulstick Shiller** received her Ph.D. from the University of Delaware. She is a postdoctoral fellow at the Bush Center in Child Development and Social Policy at Yale University. Virginia lives with her husband, Robert, and two-year-old son, Benjamin, in New Haven, Connecticut.

**Robin D. Wiener** received her J.D. degree, Magna Cum Laude, from Harvard University last June. She was an editor of the *Harvard Law Review* and the *Harvard Women's Law Journal*. Currently, Robin is a law clerk for the U.S. Court of Appeals for the Ninth Circuit in Los Angeles.



**Terrie M. Williams** is *director of public relations for Essence Communications Inc., and secretary of the board of directors of the New York chapter of the Public Relations Society of America.*

**Jerrold Baum** and **Ellen Bernstein '76** were married September 1984.

**Jan Graff Loew** and Dr. Jerome M. Loew are delighted to announce the birth of their son, Benjamin Andrew, on December 9, 1983.

**Robin** and **David Lewkowicz** announce the birth of a daughter, Sherry Beth, on May 24, 1984.

Born to **Joan Glazer Margolis** and **Stuart Margolis**, a son, Aaron Robert, on January 15, 1984.

**Michael E. Smith** and Cynthia Heath Smith announce the birth of their second daughter, Heather Colleen.

Born to **Phyllis Witzeld Speiser** and Mark Speiser, a daughter, Shoshana Sara, on March 27, 1984.

'76

**Rabbi Susan Abramson** was formally installed as Rabbi of Temple Shalom Emeth in Burlington on November 2, 1984. Susan is only the second female Rabbi in Massachusetts with a full-time pulpit.

**Laurie Gilbert Albert** received her M.B.A. in marketing from La Salle College in Philadelphia last May. She and her husband, David Albert, are the proud parents of Joshua Benjamin, born on April 8, 1984.

Steve and **Ellen Feinberg Blitz** announce the birth of their son, Zachary David, on July 1, 1984. Ellen has been named one of New York's outstanding communicators during the 75th anniversary celebration of Women in Communications. Ellen also received a silver award in the International Association of Business Communicators New York Chapter's 1984 competition.

**Valerie Susan Carter** received her J.D. degree from Northeastern University School of Law in May 1984.

**Arnold Glick** is an attorney in the Boston area, and creator of a new law-oriented cartoon entitled "Jest is for all." The cartoon has been published in legal newspapers in Chicago, Cleveland, Detroit, Miami, Rochester, Sacramento, New Jersey and New Hampshire.

**Amy Ellen Goch** received her Ph.D. in psychology from Emory University at the end of the 1984 spring semester.

**Jennifer Beth Kohn** received her J.D. degree from Northeastern University School of Law in May 1984.

**Bonnie Koppell** is Rabbi at the Jewish fellowship of Davis, California; Rabbi Koppell received her master's degree in religion from Temple University in 1978 and was ordained at the Reconstructionist Rabbinical College in 1981.

**Vickie Kanrek** is a network proposal specialist with Bolt Beranek and Newman; Vicki resides in Malden, Massachusetts with her two cats Wotan and Tristan, following her divorce from Tim Clark (Grad '80). She also does volunteer work as a veterinary assistant.

**Helene Cohen Newman** lives in Rochester, N.Y. with her husband, Bruce, and daughter, Joy Shana, born November 1983. Helene completed her master's degree in counseling in 1981.

**Joyce M. Doonan** graduated from the Medical College of Pennsylvania last May. She is completing her residency in anesthesiology at the Medical College of Virginia.

Born to **Roy Cohen** and **Mimi Tanzer Cohen '77** a daughter, Sarah Tanzer, on November 4, 1983.

**Dr. Zachery E. Gerut** and Robin Gerut announce the birth of a son, Benjamin Samuel, in April 1984.

Born to **Jane Miliotis** and her husband, **John J. McQuade, Jr. '76**, a daughter, Caitlin E. McQuade, on May 30, 1984.

'77

**Roberta R. Franks** received her Ph.D. from the department of microbiology and cell science of the University of Florida last April. She is currently a post doctoral fellow in the division of biology at the California Institute of Technology.

**Dr. Mark B. Lonstein** is a resident in orthopedic surgery at the George Washington University Medical Center in Washington, D.C. Mark resides in Arlington, Virginia.

**Pamela Sokoler Mattes** has recently settled in her new home in Westchester County with her husband, Brad, and daughter, Danielle, born in April 1984.

**Jerry Muller and Sharon (Sachs) Muller** live in Silver Spring, Maryland, with their son, Elisha, and daughter, Sara. Jerry has joined the faculty of The Catholic University in Washington, D.C. after receiving his doctorate in modern European history from Columbia University.

**Wendy Parker** graduated from SUNY-Stonybrook Medical School last May; she is in residency at St. Elizabeth's Hospital in Brighton, Massachusetts.

**William J. Robertello** received his M.D. degree from the Medical College of Pennsylvania last May. Dr. Robertello is in residency in Radiation Oncology at Sloan-Kettering Memorial Cancer Center in New York City.

**Mark and Dena Cohen Rosenkrantz** are living in Brookline, Massachusetts. Mark recently completed his Ph.D. in micro and molecular biology at

Tufts University. Dena is an associate with the law firm of Holtz & Gilman in Boston.

**Bari Diane Stauber** is the manager of personnel development for Columbia University in New York City.

**David Brotman** married **Nancy P. Green** '77 last June.

**Judy Sigel Fox** and David Fox announce the birth of twin sons, Jacob Arthur and Mathew Simon, on September 24, 1983.

Born to **Brenda Marsh Golombek** and **Steven Golombek**, a daughter, Alissa Lynn, on January 28, 1984.

**Benjamin Hoffman** and his wife, Alexa Haskell, announce the birth of a son, Aaron Haskell Hoffman, on May 18, 1984.

Born to **Wendy Parker** and Ric Sperling, a son, Scott Eric Sperling, on April 19, 1984.

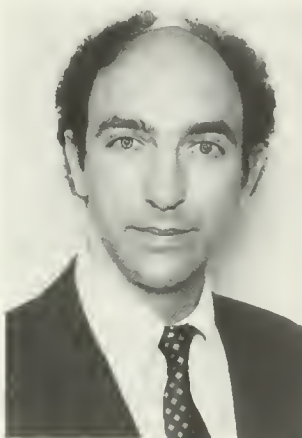
'78

**Therese Provenzano Butler** is director of the Choral Union at Boston University. She is also a lecturer at Northeastern University.

**Susan Gellman** is a student at Ohio State University's College of Law. Susan married Jack Chomsky in 1982. They reside in Columbus, Ohio.

**Dr. Robert M. Hersh** received his D.M.D. from the University of Pennsylvania School of Dental Medicine in 1982, and completed a two-year general practice residency at Brookline Hospital medical center. He is currently in private practice in Brooklyn, N.Y. Robert was married to Dr. Meryl J. Nagouring June 24, 1984.

**Shelly Pitterman** received his Ph.D. in political science from Northwestern University. He works with the United Nations High Commissioner for Refugees, and expects to be stationed in Yei, Sudan for two years.



**Mark Wright** is vice president of corporate lending for Patriot Bank, N.A., in Boston.

**Robert Pilavin** and **Maxine Fishbein** '79 were married on June 10, 1984.

**Ann Bolts Bromberg** and Arthur Bromberg announce the birth of a son, Yoseph Mordecai, on December 21, 1983.

Mark and **Marta Zwaig Florin** announce the birth of a daughter, Daniella, born November 30, 1983.

'79

This summer **Amy Greenberg Bard** and **Leonard Bard** passed two major milestones. Leonard received his Ph.D. in clinical psychology and their son, Joshua Andrew, was born on June 11, 1984.

**Stacey Cantor** received her M.D. degree from Stanford University School of Medicine and is training in anesthesiology at the University of Pennsylvania.

**Linda Alpert Feinstein** graduated from Brooklyn Law School last July. She has been married to Robert Feinstein since July 1983.

**Jessica K. Laufer** is director of special projects for Nancy Low & Associates Inc., a Washington, D.C. communications and marketing firm. Jessica manages national broadcast programming and market evaluation projects involving children and adolescents.

**David Lichter** and his wife, Mayra, have returned home to Miami, where David has accepted a position as assistant United States attorney for the Southern District of Florida.

**Larry Miller** and his wife, Robin Silverman, have settled in New York City. Larry is with WHTZ-FM in New York City and regional director of affiliate relations for NBC's Young Adults Radio Network, "The Source." Robin is attending the Fashion Institute of New York.

**Dr. Roy Naturman** is completing his residencies at New England Medical Center and Brigham and Women's Hospital in Boston.

**Wendy Robinson** received her master of arts in Jewish Education in May 1984 from Hebrew Union College in Los Angeles. Wendy is the director of education at Temple Sobel in Paradise Valley.

**Robbin Schneider** recently completed her Ph.D. in clinical/school psychology from Hofstra University in Long Island, New York. Robbin is now a school psychologist at the United Cerebral Palsy of Queens and plans to begin a private practice in the near future.



**Sharon Leigh Toffler** received her J.D. degree from Northeastern University School of Law in May 1984.

**Barbara Shaughnessy Danforth** and Thomas Danforth announce the birth of a son, David Thomas, on August 22, 1984.

'80

**Bess S. Abramowitz** has received her M.D. from U.M.D.N.J. New Jersey Medical School, and is a resident in internal medicine at Thomas Jefferson University Hospital in Philadelphia.

**Meryl J. Epstein** is a first-year student in the cooperative legal education program at Northeastern University School of Law in Boston.

**Donna S. Levinston** became a member of New Jersey and Pennsylvania bars, and is with the law firm of Coleman, Dember & Jaffe Counselors at Law, in Lawrenceville, New Jersey.

**Fredric R. Miller** graduated from SUNY-Down State Medical School May 1984.

**Lisa Feldman Naturman** is with the Infusaid Corporation in Norwood, Massachusetts; she is enrolled in the M.B.A. program at Boston College.

**Michael Roffer** graduated from New York University Law School in June of 1983 and was admitted to New York State Bar in February 1984. He presently serves as law clerk to the United States District Judge in Albany, New York.

**Gary Loren and Marlene Dolinsky** '82, married November 1983, now

reside in Pennsylvania where Gary is an intern at the University of Pennsylvania Medical Center.

**Lewis Brooks**, former president of the Student Service Bureau (SSB) and **Denis Silber** '84, former chairperson of the programming board (PROBO), announced their engagement! The wedding is planned next summer.

Born to Daniel and **Deborah Weiss Glass**, a son, Sean Charles, on August 1, 1984.

'81

**Stephen Abramoff** received his J.D. degree from the Miami University School of Law, and is practicing in the Boston area.

**Julie Blinderman Bennett** received her J.D. degree with honors from Rutgers University School of Law, where she served as associate articles editor of the law review. Julie was also a Federal Judicial Clerk in Pennsylvania, and accepted a judicial clerkship in the Superior Court of New Jersey, Chancery Division, in Atlantic City.

Julie's husband, **Gregg Bennett** '81, is a fourth-year medical student at the University of Medicine and Dentistry of New Jersey.

**Amiet Goldman** received her M.B.A. in marketing from New York University in June. She is a marketing representative for IBM on Wall Street.

**Karmit Julie Hayman** received her J.D. degree from Northeastern University School of Law in May 1984.

**Stuart Miller** is in his first year at Georgetown University Medical School, Washington, D.C.

**Norman Pernick** and his wife, Paula, are living in Wilmington, Delaware. Norman received his J.D. from George Washington University last May. He is an associate of Potter, Anderson & Corroon; Paula is an RN at the Arthur I. DuPont Institute.

**Pamela (Penny) Rosenthal** is the promotion manager in charge of Dell Yearling and Laurel-Leaf books, and Delacorte Press Books for Young Readers, a Division of Dell Publishing Co., Inc., of New York City.

**Derrick Troy Walker** graduated from Hastings College of the Law in San Francisco, and is now an associate with an entertainment law firm in Los Angeles.

**Diane Solomon Litt** and Jeremy Litt were married in June 1983.

'82

**Steve Gans** has signed professionally with the Baltimore Blast, the 1984 champions of the major indoor soccer league, for its '84-'85 season. Steven also has an opportunity to combine his marketing and writing skills working with the management office and in making public appearances. He is the team representative to the Maryland Special Olympics.

**Marcia Halpern** and **Mark Meyer** reside in Manhattan, where Marcia is a network negotiator for S.S.C. & B. Advertising Agency, and Mark is a systems coordinator for J. Henry Schroder Bank and Trust Company. Marcia and Mark were married in November 1983.

**Lois Tuerk** married Robert Mendelson on September 2, 1984.

'83

**Kenneth Epstein** is enrolled as a student at Albany Medical College in upstate New York.

**Lois Kaplan**, a reporter for *The Daytona Beach News-Journal*, resides in Daytona Beach, Florida.

**David Lewis** is a Ph.D. candidate and teaching assistant in political science at the University of Pennsylvania.

**Scott Travers** has written *The Coin Collector's Survival Manual*, honored as "Book of the Year" (1984) by the Numismatic Literary Guild. Scott is a contributing editor at *Coinage* magazine, and president of Scott Travers Rare Coin Galleries, Inc.

**Lois Zeller** and **Jay Afrow** '83 have announced their engagement.

**Ricky (Rebecca) Stamler** and **Stanley Goldberg** '84 are announcing their engagement. Ricky is currently teaching at the Ramaz School in Manhattan, and is attending Hunter College's master's program in special education. Stanley is attending SUNY School of Medicine at Stonybrook; their wedding is planned for July.

**Ira Price** and **Amy Palman** '84, married on July 15, 1984.

'84

**Robert Berns** is a first-year student at Whittier College School of Law in Los Angeles.

**Heidi Lynne Block** married Michael Barishman on July 1, 1984. Heidi is attending Western New England College School of Law on a full merit scholarship. Heidi's parents, Alan and Anne Fishbein Block '61, are also Brandeis graduates.

'54 **Halim El-Dabh** (M.F.A.) received a research and creative activity appointment from Kent State University for the summer of 1984. Halim, an internationally known composer and professor of ethnomusicology, studied the music of sacred Afro-Brazilian rituals.

'67 **Barbara Felner** (Ph.D.) is director of the division of health sciences policy of the Institute of Medicine of the National Academy of Sciences. In addition to her new position, Dr. Felner is president-elect of the Association for Women in Science, a national organization.

'68 **Patricia Frazer Lamb** (M.A.) is the recipient of a Bunting Fellowship for 1984-1985 to research the history of women travelers in Africa in the 19th century. Her book, *Touchstones*, published by Harper & Row was dramatized at the University of Minnesota Theater Arts Department and performed last May.

'72 **Dr. Laurence J. Silberstein** (B.A. '58, Ph.D.) has been appointed to the new Philip and Muriel Berman Chair of Judaica at Lehigh University. He also directs the Lehigh Center for Jewish Studies.

'74 **Leon Arka Chorbajian** (Ph.D.) is a sociology professor at the University of Lowell, Massachusetts.

'76 **Tahi Lani Mottl** (M.A. and Ph.D.) joined the faculty of Occidental College as an assistant professor.

'78



**Joan E. Lancourt** (Ph.D., Heller) is director of personnel of New England Electric System Companies.

'79

**Helene Fischer** (B.A. and M.A.) received her Ph.D. from the Rockefeller University in New York. Her graduate research has focused on understanding the mechanism of bacteria-antibiotic interaction. Dr. Fischer is also an M.D. candidate at the Cornell University Medical College in New York City.

'80

**James Bryant** (M.A.) was recently appointed by the Oklahoma governor to the position of district judge. Judge Bryant had served as an associate district judge.

'82

**Toni Lenz Tinberg** and **Howard B. Tinberg** (Ph.D.) returned home to Pawtucket, Rhode Island last August after a year teaching English at Shanxi University in the People's Republic of China.

'83

**Steven K. Wisensale** (Ph.D.), assistant professor at Nichols College in Dudley, Massachusetts, was presented the Research Award at the Fourth Annual Conference of the North Eastern Gerontological Society held recently in Philadelphia. The award was given for his paper: "Home Care of the Elderly: Does Household Composition Matter?"

## Obituaries

**Dr. Jerome Sheiffer** '55 died May 24, 1984 in Englewood, California. Jerome was chief of staff at the Daniel Freeman Hospital in Los Angeles. He is survived by his wife, Beverly, and son, Brett.

**Natalie Klein Sokol** '55 died on September 12, 1984, in the Baystate Medical Center, in

Springfield, Massachusetts. Natalie was a past president of the Brandeis Women's Auxiliary and the Brandeis Alumni Association of Western Massachusetts. She is survived by her husband, David L. Sokol, and her two sons, Marc and Eric, and her daughter, Barbara.

**Michael Gass** '70 died of pneumonia on February 24, 1984 in New York. Michael was an art director for station WABC (Channel 7) and had won an Emmy award in 1981 for his work on "Good Morning America." He is survived by his parents, a brother and sister.

**Emmanuel "Manny" Gilbert**, former director of public affairs and special assistant to the president at Brandeis from 1951-1965 died June 19, 1984. In his memory, the "Manny" Gilbert Scholarship has been established. Contributions to the scholarship may be sent % Dr. Abram Sachar, Chancellor of the University. "Manny" is survived by his wife, Belle Gilbert, his daughter, **Laurie Gilbert Albert** '76, and his son, Steven Gilbert.

## Newsnote

What have you been doing lately? Let the alumni office know — and send them photos and news that would be of interest to your fellow classmates.

We invite you to submit articles, photos or news of interest to the Alumni Office for review.

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## News



# The Literary Life of Leda LeBrun — or My Secret Career

## View From Boston Rock

by George Ross

I have a secret. Promise not to tell anyone. Alongside painstaking, publish-a-little, perish-a-little work as a sociologist, I am a ghostwriter. In the most recent issue of the *Newsletter of the Conference Group on French Politics and Society* (which circulates among specialists on France and which I co-edit) you can read an article entitled *Nouveautés de Paris — Notes of a Frequent Flyer* written by a certain Leda LeBrun.

LeBrun is identified as “a Boston writer with a special relationship to the sights, sounds and smells of Paris.” Her article is, I believe, a witty and charming discussion of a few quirks and ironies of the French. Things like Paris Mayor Jacques Chirac’s marvellous green-and-white motorcycles with the brushes on the back which remove animal leavings, President Mitterrand’s inauguration of Paris’ new rock-and-roll hall, the peculiarities of French middle class appointment books, and other *faits divers*.

Newsletters like ours exist primarily to keep scholars up to date on a wide range of weighty matters. As a steady diet, while informative and useful, they are hardly prime-time entertainment. Thus we have enlisted the talents of Leda LeBrun to lighten things up. Successfully, it appears. “Notes of a Frequent Flyer” prompted an editor at *The New York Times* to intimate that this august journal might find a place for writers of Ms. LeBrun’s caliber.

LeBrun herself is perfectly indifferent to accolades of this kind. Leda LeBrun is not your ordinary free-lance writer. In fact, her idea of making waves in the literary world is to skulk about underneath the table at Cambridge dinner parties. And her major reaction to *The New York Times* is raucous outrage at the person who dares to deliver it so

early in the morning onto her front steps. Indeed, Leda LeBrun is blissfully unaware of her rising celebrity. The truth is, Leda is a dog. She is a *brown* dog, of course, hence her family name.

Choosing a dog to be one’s literary ghost is strange, you may well think. Nonetheless, I assure you, it all happened by chance. In the first issue of the *Newsletter* which I edited, we were short of material and I had already done considerable writing of my own. Yet we needed light-hearted pieces to break an overly scholarly mood and it was too late to solicit them from outside. Leda LeBrun was a name which we knew no one would recognize and which sounded vaguely French. Hence, Leda LeBrun took pen in paw for the first time. She reviewed a film about the events of May-June 1968 in Paris, full of news footage of students confronting riot police and the like. It took restraint not to insert comments in Leda’s review about “the magnificent coursing muscles of the police dogs.” But I managed to contain the urge.

Leda is an unlikely candidate, even for a dog, for such a promising literary career. Her real forte is recklessly chasing tennis balls in the meadow near our house. She may have some of the psychic prerequisites for her new trade, however. She has, for example, spent a short period in psychotherapy after her veterinarian, having fended off a particularly unwelcoming response to his healing attentions, looked up with terror in his eyes and choked out “your dog has problems.” He then referred us to a “pet therapist” who did behavior modification.

Always reaching towards the frontiers of medical science, we invited this individual to our house (yes, he still does house calls). He proved to possess an uncanny skill at bringing Leda’s deeply-buried superego to the surface. With the usually ill-behaved future free-lance writer lying pacified and angelic on the floor, he lectured us on how to

encourage correct canine comportment. Of course, 15 minutes after he had gone out our door with \$45 in hand, Leda had reverted to her pre-couch frenetic hyperactivity. Being one of the few families in our set to have had our dog shrunk gets us good mileage in Harvard Square/Left Bank circles, so it wasn’t a total loss. For the good of her creative career, however, Leda LeBrun remains resolutely neurotic.

Having Leda as staff writer on the *Newsletter* has definite advantages. We’ve just received a French book on humor in politics to review. We brought it upstairs to read before bed in search of a few guffaws about General de Gaulle and a snicker or two about Francois Mitterrand. Alas, humor is not a subject which lends itself well to social scientific analysis. The author, after taxonomizing political humor into three ideal types and citing Montesquieu at length, manages to write 150 totally unamusing pages — *à dormir debout* as the French would say. My editor’s instinct tells me that the book should be reviewed. Yet the reviewer who said what needed to be said would certainly offend both author and publisher. An ideal task for Leda LeBrun?

It would be a shame not to encourage such a promising career. If Leda LeBrun continues to produce at her current rate she’ll have a creditable *curriculum vitae* in no time. Then what? An assistant professorship at some progressive liberal arts college known for its total devotion to equal employment opportunity? Copywriter on Madison Avenue (perhaps in the pet food trade?) European correspondent for *The New Yorker*? Suggestions are welcome! ■

*George Ross, professor of sociology at Brandeis, is also senior associate at the Harvard Center for European Studies and the author, with Jane Jensen (who is also a very important idea person for Leda LeBrun) of The View From Inside: A French Communist Cell in Crisis, published by the University of California Press.*

# Brandeis University Gifts



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Mark your calendars!!

Sunday, April 28, from 11:30 a.m. to 5:30 p.m. the Brandeis Hillel and the Boston Jewish Arts Coalition of the American Jewish Congress present the 1985 Jewish Arts Festival.

The Festival will include exhibits, workshops, and performances featuring Jewish artists and artisans. "Hands on" and "Sing-along" workshops have also been scheduled along with musical, dance and dramatic performances, poetry readings and exhibits.

Reunion 1985 will take place during Commencement Weekend, May 17, 18 and 19 for the following classes: 1955, 1960, 1965, 1970, 1975 and 1980. A series of events have been planned for the returning alumni that include the traditional Ralph Norman Emeritus barbecue, dinner, class parties and a symposium. If you are a member of any of those classes, please let the alumni office know of your current address so you can receive information about the festivities.

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## Brandeis Review

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